



Happy the YOUTH, who are betimes set right, —
And taught the Rules of VIRTUE with delight!
By soft Endearments Generous Minds are won:
By rigid doctrines very Few or None: —
The CYNIC TUTOR fruitless Lectures reads:
HE who Gilds o're his Precepts best SUCCEEDS.

THE
YOUNG MAN'S Companion:
OR,
ARITHMETICK made easy.

CONTAINING,

Plain Directions for a Young Man to attain to Read and Write *true English*; the best and easiest Instructions for *Writing* Variety of Hands, with Copies both in Prose and Verse, digested in an Alphabetical Order. How to write Letters of Compliment, Friendship, or Business. Forms of Notes, Receipts, Bills, Bonds, Indentures, Leases, and Releases, Letters of Attorney, Wills, &c.

A short and easy Method of SHOP and BOOK-KEEPING, MERCHANTS ACCOMPTS, &c.

Directions how to measure *Carpenters, Joiners, Sawyers, Bricklayers, Plasterers, Plumbers, Masons, Glaziers, and Painters* Work. With Tables for such as have not learn'd *Arithmetick*. How to compute the Charge of *Building* an House, or any Part thereof. The Rates of each Commodity, and the common Wages of *Journeymen*. Measuring, Gauging, Plotting of Land by *Gunter's Chain*, and taking Heights and Distances by the *Quadrant*, &c. Of *Gunter's Line* in measuring Globes, Bullets, Walls, &c.

The Art of *Dialling*, and how to direct and fix any *Dial*: Instructions for *Dying, Colouring, and Making of Colours*.

With a Description of the Counties, Cities, Parishes, and Market-Towns in *England and Wales*.

Choice Monthly Observations in *Gardening, Planting, Grafting, and Inoculating Fruit-Trees*, and the best Time to prune them.

To which is added,

The FAMILY COMPANION for Marking on Linen, Pickling, Preserving, Making Wine of Fruit; with many approved and experienced Medicines for the Poor.

ALSO

Exact LISTS of all the FAIRS in *England and Wales*, both Fix'd and Moveable; wherein the MARKET-TOWNS are likewise distinguished by the Days of the Week, on which their Markets are held.

AND ALSO

TABLES of Interest at 3, $3\frac{1}{2}$, 4, and 5 per Cent. per Ann. from one Pound progressively to one Hundred, and from One Day to Thirty, and from one Month to a Year.

Written by W. MATHER, in a plain and easy Stile, that a Young Man may both readily and easily improve and qualify himself for Business, without the Help of a Master.

The Twentieth Edition, with large Additions and Improvements.

LONDON: Printed for R. WARE, on Ludgate-hill; T. and T. LONGMAN, in Pater-noster Row; and W. JOHNSTON, in St. Paul's Church-yard. 1755.

(Price Two Shillings and Six-pence.)



R



bu
an
Fo
yor
foe
ala
tia
ba
th
pla
th
no
A
E
of
fo
w
fu
ib
C
D
m
E



T O T H E
R E A D E R.

 **T**HIS Book having already passed thro' Nineteen several Editions, is, doubtless, a sufficient Proof of its general Use and Service; but as it was still capable of greater Improvements, it was thought proper that it should not only stand possessed of the many Advantages it before had, but be likewise further enlarged under the general Heads, and every Thing set forth in the clearest and plainest Light. For the Truth of which, there needs no more, than to refer you to the Table of Contents, and the Book itself; which will soon make you entertain a better Opinion of its Merit, than all that can be possibly urged here by Way of Recommendation: Only I will here advertise you, that this Impression has been very carefully corrected by a Person of Skill, and the Arithmetick Part especially very much improv'd and explain'd: All the Tables calculated afresh, and the Errors, that had crept in, carefully amended; so that whatever is now in it, may be depended on for its Truth and Exactness. And that it might be still more universally useful, to this Edition is added TABLES, by which the Interest of any Sum of Money for any Time may be known almost by Inspection; for the Numbers go progressively from One to One Hundred, which is not in any other Book of this Sort, and the Rates are such as are in daily Use, viz. 3, $3\frac{1}{2}$, 4, and 5 per Cent. So that almost any Thing may be wrought by them, whether it be Commissions for Sale of Merchandize, Interest of publick Bonds, Discount of Notes, or Bills of Exchange, according to the common (though it must be own'd erroneous) Method. — A few Examples will make all plain.

A 2

Suppose

To the READER.

Suppose I have 5 *East-India* Bonds that amount to L. 500 principal Money, what comes the Interest to at L. $3\frac{1}{2}$ per Cent. per Annum for 29 Days?

First look for 29 Days in the *head Line*, and against L. 500 in the first Colum, you will find L. 1 7 9 $\frac{3}{4}$ in the Column of L. $3\frac{1}{2}$ per Cent. and so much is the Interest of L. 500 for 29 Days at $3\frac{1}{2}$ per Cent.

How much present Money must I receive for a Bill of Exchange of L. 373 Value, that has 17 Days to run at L. 5 per Cent. per Ann. Discount.

Note, Where the Sums are not very large, nor the Time long, the Difference between Interest and Discount is insignificant; and therefore in common Practice, Interest upon the whole Sum is deducted; but if the Sums were large, and the Time long, there would be a great deal of Injustice done to the discounting Person, by making him pay considerably more than he ought; but as in common Business, Notes are seldom discounted for more than a Month, it is not worth regarding: As in our present Example.

L.	L.	s.	d.
The Interest of 300 for 17 Days at 5 per C.	0	13	11 $\frac{1}{2}$
73	0	3	4 $\frac{1}{4}$
373	is	L. 0	17 4 $\frac{1}{2}$
Deduct 0 17 4 $\frac{1}{2}$			
L. 372 2 7 $\frac{1}{2}$	is the present Money.		

Note, When you use these Tables for Commissions, Discounts at publick Sales, &c. you must mind to take the Interest of a Year at the Rate you want, because in those Cases you always allow, or are allowed the full Amount of 2, 3, 4, &c. per Cent. which here is no where expressed but in that Leaf where it is called twelve Months, or a Year, all others being but proportionable Parts of the Interest for the Time, as you will plainly see by comparing the L. 100 Line.

You will also observe, that Commissions and Discounts at publick Sales are frequently at Rates not mentioned in these Tables; and so likewise are the Dividends at the Bank, India-House, South-Sea-House, &c.

Commissions for Buying or Selling, &c. are frequently at L. 1. L. $1\frac{1}{2}$, L. 2. L. $2\frac{1}{2}$, &c. per Cent. Under this Circumstance,

To the READER.

Circumstance, for L. 2 $\frac{1}{2}$, you may take either the Half of 5 per Cent. for 12 Months, or the whole Amount for six Months. So for 2 per Cent. the Half of 4 per Cent. for the Year, or the Whole of 4 per Cent. for six Months; and for 1 $\frac{1}{2}$, the Half of 3 per Cent. for a Year, or the Whole for six Months; and for 1 per Cent. the third Part of 3 per Cent. &c. or the Amount of the Whole for four Months, &c. which is the third Part of a Year, as in the following Examples.

What comes the Commission of L. 519 to, at 2 $\frac{1}{2}$ per Cent. ? Answer, L. 12 19 6; for by the Tables, the Interest of L. 519, for a Year at 5 per Cent. is L. 25 9, the Half of which is L. 12 19 6; or,

L.	L.	s.	d.
The Interest for 6 Months of 500, is	12	10	0
19		9	6
519	12	19	6

And so in any other Case.

Discounts at publick Sales are usually at 6, 7, or 8, per Cent. Under this Circumstance, you have nothing to do, but to double the Sum found in the Tables for Half the Interest for one Year, or to take the Interest of double the Sum required. As for Example.

Suppose I have bought as many Lots of Tea at the India Hou'e, as amount to one thousand Pounds, and the Prompt is L. 6 per Cent.

Here I look for the Amount of L. 1000 for a Year, at 3 per Cent. and find it L. 30, which doubled makes L. 60; or I look for the Interest of L. 2000 for the same Time, and it is likewise L. 60. And so of any others.

There remains only now one Objection to answer; and that is, if there should be odd Shillings in the Bill or Sum; whose Interest is desired; as, suppose the Sums were L. 318 12, L. 516 4, or L. 169 7, &c.

To this I answer: If the Time does not exceed a Month, and it be under ten Shillings, you may reject it, for the Interest of ten Shillings for a Month is but a Half-penny at L. 5 per Cent. and but a Farthing at L. 3. per Cent. and if it be more than ten Shillings, you may reckon a Pound for them, without erring more than a Farthing; as in the Example above: For L. 318 12, you may take the Interest of L. 319, and for L. 516 4, only L. 516, &c.



A TABLE of CONTENTS.

A.	Page
A BREVIATION of Words	26
Arithmetick	117
Addition	121
Proof of Addition	132
Addition of Time	131
Apothecaries Weight	129
Avoirdupoize Weight	127
Accompt, to balance or clear, when full written	293
at the Year's End	294
Apricots to candy	330
Ague, to cure	332
B.	
B OND	89
Condition of it	90
to stand to Award	ibid.
Bill of Sale	93
Debt	102
Bills of Parcels	104
by wholesale Dealers	115
Book-keeping	284
Building. Platform for an House	254
Charge of building it	253
Burn or Scald, to cure	332
Bruises inward	333
outward	ibid.
Bellies swell'd in Children	ibid.
Bleeding at the Nose	ibid.
Boils	ibid.
Blood to purge	ibid.
Breath	

A Table of CONTENTS

	Page
Breath short	333
Bricklayers Work	262
Barberries, to preserve	331
C.	
CARPENTERS Work	254
Plain Rule	260
Children, Sons and Daughters	96
Codicil to a Will	83
Copies, single Line, Alphabetical	31
easy to write by	43
of two, four, and six Lines, in Verse	52
Circuits and Counties in <i>England</i>	318
Cyder, to make	328
Currant Jelly	329
Cherries, to preserve	ibid.
Currants, to preserve	330
Costiveness, to cure	333
Cough	ibid.
Consumption	ibid.
Galloping	ibid.
Chops in the Hands	334
Lips and Nipples	ibid.
Convulsion Fits	ibid.
Corns	ibid.
Cramp	ibid.
Cross Multiplication	251
D.	
DEED of Gift of Goods	82
Division	159
Proof of Division and Multiplication	175
Directions for Spelling, Reading and Writing true <i>English</i>	1
Beginners to learn to write	27
Dialling	313
Damsons, to preserve	330
Deafness, to cure	334
Digestion, weak	ibid.
Dropsy	ibid.
E.	
ENGLAND, its Division, &c.	317
Counties, Cities, Market-Towns	319
Parishes in it, &c.	ibid.
Byes dim, to cure	334
F.	

A Table of Contents.

F	FELLOWSHIP, Rule of it —————	F.	Page
	with Time ————		217
Fractions ————	—————		219
Face scabby, to cure ————	—————		221
Fainting ————	—————		335
Feet galled ————	—————		ibid.
Flux ————	—————		ibid.
Fundament fallen ————	—————		334
Fever ————	—————		335
Fire, St. Anthony's ————	—————		332
Fairs in England and Wales, Fix'd ————	—————		ibid.
————— Moveable ————	—————		338
	G.		355
G	GARDENING ————		320
	Monthly Observations on it ————		ibid.
General Rules for Book-keeping ————	—————		286
General Release ————	—————		94
Glaziers Work ————	—————		268
Geometrical Progreſſion ————	—————		216
Golden Rule ————	—————		196
Gauging ————	—————		306
Gunter's Line ————	—————		250
Gangreen'd Sore, to cure ————	—————		335
Giddineſs ————	—————		ibid.
Gripping in the Guts ————	—————		ibid.
Gums, ſore ————	—————		ibid.
Gout, or Rheumatism ————	—————		334
Gooseberries, to preſerve ————	—————		330
	H.		
H	HANDS kib'd, to cure ————		334
Head-ach ————	—————		335
Heart-burn ————	—————		336
	I.		
I	IN K, to make Black ————		30
Red ————	—————		ibid.
————— to keep from Freezing or Moulding ————	—————		31
Indenture for an Apprentice ————	—————		88
Journal ————	—————		285
Joiners Work ————	—————		268
Jelly of Apples, to make ————	—————		332
Jaundice, to cure ————	—————		336
Itch ————	—————		ibid.
	K.		

A Table of CONTENTS.

	K.	Page
K ING's Evil, to cure	—	336
	L.	
L ETTERS, great and small, when to be used, &c.	—	1
— founded alike, how to avoid Mistakes, &c.	—	11
Letters, or Epistles, of Complaint, Business, &c. with their Answers	—	63
Supercriptions for Letters,	—	80
How to begin	—	81
How to subscribe	—	ibid.
Letter of Attorney	—	87
— revoked	—	ibid.
Letter of Attorney from a Seaman	—	88
Letter of Licence	—	92
Leidger	—	285
Lice	—	336
	M.	
M EDICINES	—	332
Multiplication	—	140
Multiplication of mix'd Numbers	—	151
Proof of Multiplication	—	158
Multiplication of Fractions	—	233
— of Decimal Fractions	—	242
Measuring	—	244
— of round Timber	—	247
— Board, or Glass	—	248
— square Timber	—	249
— Brick Walls	—	ibid.
— Carpenters Work	—	254
Measure of Board and Timber, by Fractions	—	258
Timber-measure	—	259
Bricklayers Work	—	262
Plasterers	—	266
Tiling	—	265
Paviours Work	—	267
Joiners	—	268
Glaziers	—	ibid.
Painters	—	269
More of Measuring	—	296
— Land	—	297
— by Gunter's Chain	—	300
— Wood by the Quadrant	—	306
		Marking

A Table of CONTENTS.

	Page
M arking	325
Copies	326
M ead, to make	328
White	331
M elancholy and Madnefs	336
N.	
N OTES, Promissory	103
Numbers to be read, or written	120
N umeration-Table	119
O.	
O BIGATION of a Bond	98
Observations on Wills	86
P.	
P EN, to make	29
Points or Stops in Writings	23
P arts of a Shilling	273
P arts of a Pound	ibid.
P ractice, Rule of	ibid.
P arishes in <i>England</i>	319
P rogression, Arithmetical	215
P ainters Work	269
P aviours	267
P laisterers	266
P lumbs, to candy	330
P ears, to candy	ibid.
P lumbs, to preserve	ibid.
P ippins, to dry	331
P laister, <i>Melilot</i>	337
P oultice	ibid.
P urge safe for all	335
P oison, newly taken	ibid.
P iles, to cure	ibid.
P ain sudden, to cure	ibid.
Q.	
Q UADRANT, the Description of it	312
measuring by it	313
R.	
R ECEIPTS in-Business	97.
Reduction	171
R ule of Three	196
R ule of Fellowship	217
with Time	219

Receipts

A Table of CONTENTS.

	Page
Réceipts for making Colours	271
Rickets, to cure	337
Running of Reins	ibid.
S.	
S ERVANTS	97
Subtraction	132
Small-Pox, to cure	337
Sudden Swelling	338
Spleen, to cure	ibid.
Syllables, how to divide	5
T.	
T ABLE of Pence	123
Table of Multiplication	141
Table of Practice	273
Tare and Trett	281
Trett	283
Troy Weight	128
Tables of Interest	361
U.	
U MPIRAGE of Award	91
Verjuice, to make	331
Ulcers, hollow, to cure	337
W.	
W ORDS alike in Sound, but different in Sense	15
Writing, Directions for it	27
with Shell Gold	62
secret Letters	ibid.
Will of a Man having no Children	81
Another Will	83
Another	85
Wives, Children, and Servants	95
Waste Book	285
Wines, to make Cherry, black Cherry	329
Currant	328
Strawberry	329
Gooseberry	328
Walnuts, to preserve	330



TO
Young People.



HAVE in this Twentieth Edition left out the several Alphabets of Letters, as thinking them unnecessary here. Most People, now-a-days, bring up their Children both to read and write, yet there is scarce One in Twenty that writes tolerable English; and this Defect is to be found amongst Persons of either Sex, as well those who are descended from wealthy Parents, and are of good Parts, as others of meaner Birth; who, notwithstanding many of them can write good Sense, and a fair Hand, yet oftentimes commit such Errors in Spelling, as expose them to the Laughter and Derision of others, and so makes them ashamed to express their Minds in Writing, to the great Prejudice of their Affairs.

To accommodate such, I have, from my own long Observation, collected and digested the following Rules and Directions; which, I doubt not, will be of sufficient Use: For if these Rules are carefully observed, they will make you a good Master of the English Tongue.

DIREC.

DIRECTIONS

For Spelling, Reading, and Writing

TRUE ENGLISH.

Of LETTERS, great and small, and when each are to be used; their Division into Vowels and Consonants: Of DIPHTHONGS, what they are, how many, and how pronounced and written.



HERE is no Building surely without a good Foundation. Therefore whoever would attain the Accomplishment of Writing all Sorts of *English Words* properly; and Scholar-like, must, in the first Place, endeavour to understand Letters, whereof all Words are composed.

These are in Number *Twenty-four*, and are to be considered in their *Form*, their *Nature*, and their *Force*.

1. As to their *Form*, Letters are either *small*, as *a, b, c*, &c. or *great*, (which are called *Capitals*) as *A, B, C*, &c. and to know when rightly to use the *small Letters*; and when the *great ones*, is the first Step towards good Clerkship; wherein this Rule will guide you.

You must never use great Letters in the *Middle* or *End* of any Word, unless the Whole be wrote so, as *LORD*, but always in the *Beginning*; and there too, only in these six Cases following, *viz.* 1. At the Beginning of any Writing. 2. After every Period, or Full Point, when a new Sentence begins. 3. At the Beginning of every Line in Poetry, and every Verse in the Bible. 4. Proper Names of all Sorts, whether of Persons, Places, or Things, and the like, must begin with them. 5. So also must the Terms of Art, and Names of Dignities, Officers, or any other Word of special Note in a Sentence; or to which we pay a particular Defference; as *God, King, your Lordship,*
B &c.

2. *The YOUNG MAN's Companion.*

&c. And all Nouns Substantives may begin with a great or capital Letter; which may be known by the Signs *a*, *an*, or *the* before them; as, *a Man, a Mouse, an Ox, an Ass, the City, the River, &c.* And, lastly, the personal Pronoun *I*, must always be a Capital. The small Letters are every where else to be used.

It would therefore be highly ridiculous to write thus :
*master george franklin, the coroner of kent, with dorothy
 his wife, came last mARCh to loNDOn, where i met them.*

When it should be,

*Master George Franklin, the Coroner of Kent, with Do-
 rothy his Wife, came last March to London, where I met them.*

Note, There are two Forms of *f* used in Writing; the long *f*, which is always put in the Beginning, or Middle of Words; and the short *s*, which always comes in the End of Words, and sometimes after the long *f* in the Middle of Words; as *substantial Assessment*.

Note also, That *i* and *u*, for Reasons which we shall mention by and by, are oftentimes written thus, *j*, *v*.

2. As to the Nature of Letters, they are either *Vowels* or *Consonants*.

The *Vowels* are commonly counted but five, *viz.* *a*, *e*, *i*, *o*, *u*, but we must add to them *y*, when it cometh after a *Consonant*; which hath the Sound of *i*, as in *by*, *comply*, &c.

All the rest are *Consonants*, and are called so, because they have no Sound of themselves, except they be joined with a Vowel; and so are *j*, *v*, and *y*, when any of them comes before a Vowel.

Vowels, i. e. Self Sounders, are so called, because each of them gives a perfect Sound of itself; whereas the *Consonants* (that is, Sounders together with others) cannot be pronounced without one of the *Vowels* joined to them; as to say *b*, you must make use of the Sound *e* after it, and in *g*, of *u*, and in *m* or *f* of *e* before them, &c.

When two *Vowels* come together, and are not parted in Pronunciation, but the Sound of both of them is united, it is called a *DIPHTHONG* (that being originally a *Greek* Word signifying a double Sound) as *heard*, *sweet*, *People*; not *be-ard*, *swe-et*, *Pe-o-ple*.

Of these *Diphthongs* we have *twelve* that are chiefly to be observ'd; that is to say *ai*, *ei*, *oi*, *au*, *eu*, *ou*, *ee*, *oo*, *ea*, *eo*, *oa*, and *ie*; as in these Words, *Faith*, *either*, *join*, *Aul*, *Eunuch*, *Stout*, *Seed*, *Food*, *Wealth*, *People*, *Boat*, *Friend*.

Where

The YOUNG MAN'S Companion.

8

Where you may observe, that in the *first six*, both *Vowels* are fully sounded; but in the *last*, one of the *Vowels* is but little, or scarce at all heard; and therefore by some they are called *improper Diphthongs*.

Note, That *ay, ey, oy*, are also *Diphthongs*, and have the same Sound with *ai, ei, oi*; only *ai, ei, oi* are used in the Beginning, or Middle of Words, *ay, ey, oy* always in the End of Words; so we write, *Air, Fair, Heifer, either, Cloister*; not *Ayr, Fayr, Hyfer, eyther, Cloyster*; but *May, Joy, Whey*, &c. not *Mai, Joi, Whoi*.

Aw, ew, ow are likewise *Diphthongs*, and have the same Sound with *au, eu, ou*; save that *aw, ew, ow* are used chiefly in the End of Words: And *ow* is sounded flat and soft, as a *Bow*, to *mow*; whereas *ou* is more sharp and shrill, as *thou, you, adieu*; yet contrary to this Rule, we do commonly write these Words following, of a sharp Sound, with *ow*, viz. to *bow*, a *Cow*, *Flower*, *Fowl*, *brew*, *Power*, *Sow*, *Vowel*. Again on the other Side, we write some with *ou*, and yet pronounce them as flat, as the Sound of *ow* in *know*, viz. *Four*, *Soul*, *Drought*. But certainly it is an Inconveniency, that Words under one and the same Manner of Writing, should have a double and different Sound; to remedy which, some preferring Reason before corrupt Custom, use *ow* wherever the Sound is soft and flat, either in the Beginning, Middle, or End of a Word; but *ou* where it is sharp, and write thus,

I want Strength to bou this Bow.

Do you mow the Gra's, and I will lay it up in the Mou.

The Pease I sow to sat the Sou, not the Cou. How can I make up the Hop Garden without a How? Others distinguish them by adding e, as, Jane is an ill-bred Sow, and cannot sowe.

But indeed the other Writing is the more natural.

Ae and *oe* (which have peculiar Characters, viz. *æ* and *œ*) are not properly *English* Diphthongs, but *Latin*, and therefore we in *English* do for them most commonly both write and sound the single *e*, as *Equity, Female, Tragedy*, from *Æquitas, Fœmina, Tragœdia*; yet, in borrowed Words, of rare Use, and especially in proper Names, as *Æneas, Ætna, OEconomy*, &c. the best Authors use the *Diphthongs*, to denote their Original.

Question. When two Vowels come together, is it always a Diphthong?

B 2

Answer.

4 The YOUNG MAN's Companion.

Answer. No, not always; but generally where any of the before-mentioned Pairs of Vowels happen together, they make a *Diphthong*, and must be sounded jointly, except in these Words following.

Ea are parted in *Be-atitude*, *cre-ate*, *Cre-ator*, *Cre-ati-n*, *Gene-alogy*, *Oce-an*, *Page-ant*, *re-al*, *Serge-ant*, *The-atre*, *Venge-ance*.

Ei in *Athe-ists*, *Athe-ism*, *De-ity*, *Polythe-ism*.

Eo in *Dungeon*, *hide-ous*, *Mete-or*, *Pige-on*, *Scute-ion*, *Surge-on*, *The-ory*.

Oa in *Co-action*, *Co-adjutor*.

Ie in *Audi-ence*, *Bri-er*, *huri-ed*, *busi-ed*, *Clotbi-er*, *Di-er*, *Di-et*, *dri-ed*, *essi-ed*, *Gai-ety*, *Lai-ety*, *Moi-ety*, *Qui-et*, *studi-ed*.

Ui in *Ambigu-ity*, *Fru-ition*, *genu ine*, *Gratu-ity*, *su-issant*, *Perfici-ity*.

Ee in *Pre eminence*, *re-ent-er*, *re-edify*.

Oi in *do-ing* and *go-ing*.

Likewise most *Vowels*, that come together like *Diphthongs*, are parted in all proper Names of Persons or Places mentioned in the *Bible*: as *La-ish*, *Alphe-us*, *Cesare-a*, *Giibo-ab*, *Abino-am*, &c. save only *Cain*, *Cainan*, *Theudas*, *Reuben*, and *Beelzebub*, where the *Vowels* are sounded together as *Diphthongs*.

In all such Words, where two *Vowels* come together, they are to be parted, that they may not seem to make a *Diphthong*. If you would write exactly, you ought to make this Mark (·) over the latter Vowel, which is called a *Dieresis*, or a Note of Partition; thus, *Lai·ety*, *Caperna·um*, *Gilead*, &c. Tho' this now generally is omitted.

There are some few Words derived from the *French*, where three Vowels are joined in one Sound; as *Lieutenant*, *Beauty*, &c. which may be called *Triphthongs*.

Note, That altho' we have but 24 Letters, and six of them Vowels, yet we have 21 Consonants; for *i*, *u*, and *y*, when they are set before themselves, or any other Vowels in the same Syllable, become Consonants. And in such a Case, the two former must be written with a different Character from that which they have, when they are Vowels, *viz.* *j* and *v* (which by learned Men and Printers, are called *jod* and *ve*) as *jangle*, *injoin*, *Vertue*, *vulgar*, not *iangle*, *inioun*, *Uertue*, *uulgar*, which would be uncouth and absurd; therefore this is carefully to be observed.

Note,

The YOUNG MAN's Companion.

5

Note, That *j* Consonant hath the Sound of *g*, as in *join*, *jangle*, *jingle*, &c.

And tho' *y* keeps one and the same Form, yet when it is a Consonant, it differs much from *j* Consonant, and may be perceived by these Examples. — *Jet*, *yet* ; *Jew*, *Yew* ; *Joke*, *Yoke*.

Y being originally a *Greek* Vowel is rightly used ; 1. In most Words derived from that Tongue ; as *Crystal*, *Presbyter*, *Martyr*, *Apocrypha*, *Apocalypse*. 2. *English* Words that end with the Sound of *i*, may be writ indifferently with a *y*, or *ie* ; as *Safety* or *Safetie*, *Bounty* or *Bountie* : But you must never end them with an *i* only ; as *Bounti*, *Safeti*, for we have no *English* Words so terminated. 3. When *ie*, or two *ii*'s come together, *y* is put in the Place of the former, because it looks handsomer ; as *burying*, *marrying*, not *buriiing*, *marriiing*, nor *buriiing*, *marriiing*.

Of SYLLABLES, and Rules how to divide them.

IT is very necessary, both for *true Writing* and *Reading*, to understand the Nature and proper Division of *Syllables*.

A *Syllable* is either a *Vowel* or *Diphthong*, sounding by itself, or joined with one or more Consonants in one Sound, and pronounced at one Breath.

For since each of the five *Vowels* make a perfect Sound, any of them may be, and often is a *Syllable*, as *a-bate*, *e-very*. *I-vy*, *O-pin-ion*, *U-sury* ; so most of the *Diphthongs* ; as *Au-ger*, *Eu-face*, *Ow-ner*, *Ai-er*, *Oi-ster*, *Ea-ton*, *oa-ton*.

Many Consonants with one Vowel may make but one *Syllable* ; as *Length*, *Strength*, *Knight*.

Rule 1. If two *Vowels* come together in a Word, which are not a *Diphthong*, but are both fully sounded, they must be divided ; as in *Di-et*, *mutu-al*, *Tri-umph*, *co-eternal*, *co-equal*.

Rule 2. If the same Consonant be doubled in the Middle of a Word, they must be divided ; as in *Ab-ba*, *Ac-cord*, *Ad-der*, *af-fect*, *ag-gravate*, and the like.

Rule 3. A Consonant coming between two *Vowels*, must be joined to the latter ; as *E-qui-ty*, *de-li-ver*, not *Eq-uit-y*, *del-iv-er*.

Rule 4. Two Consonants between two *Vowels* do separate themselves, one to the former, the other to the latter *Syllable* ; as *Stran-ger*, *For-tune*.

6 The YOUNG MAN's Companion.

But to these general Rules, there are these Exceptions following.

First, X in any Word must be joined to the *Vowel* before it, contrary to the third Rule; as *Ox-en*, *Ex-ercise*. The Reason is, because it is a double *Consonant*, and has the Sound of *c* and *s*, which cannot begin a *Syllable*.

Secondly, Any two or three *Consonants*, which may be joined to begin an *English Word*, are not to be separated in the Middle of any Word; so you must not spell *ag-ree*, *bes-tow*, *ref-rain*, &c. but *a-gree*, *be-stow*, *re-frain*, because *gr*, *st*, and *fr*, do begin several *English Words*, as in the following Example.

The two *Consonants* that may begin Words, are Thirty in Number, &c. As in *bl. blunt*, *br. broad*, *Ch. Church*, *Cl. Cloak*, *Cr. Croud*, *Dr. Drink*, *dw. dwell*, *Fl. Flame*, *fr. frank*, *Gl. Glove*, *gn. gnaw*, *Gr. Grove*, *kn. know*, *Pl. Play*, *pr. pray*, *sc. scour*, *sh. shut*, *Sk. Skin*, *Sp. Sport*, *St. Stop*, *sl. slow*, *sm. smite*, *Sn. Snow*, *Sq. Squib*, *Sw. Sway*, *Th. Thunder*, *Tr. Treasure*, *tw. two*, *wh. whistle*, *wr. wrest*.

The three *Consonants* that may begin a Word are these nine, *viz.* *Sch School*, *scr. scrape*, *shr. shrink*, *Skr. Skrew*, *spl. split*, *Spr. Spring*, *Str. Stroke*, *thr. throw*, *thw. thwart*. All these must be spelt together, and not separated, except in compounding Words; and there each simple Word must retain its own Letters. As,

<i>mis-take</i>	} not {	<i>mi-stake</i>	} So <i>trans-pose</i> , not <i>trans- pose</i> , because it is com- pounded of <i>trans</i> . So <i>Cramp-ring</i> not <i>Cram- pring</i> .
<i>mis-like</i>		<i>mi-like</i>	
<i>mis-lead</i>		<i>mi-lead</i>	
<i>dis-lodge</i>		<i>di-sledge</i>	
<i>dis-close</i>		<i>di-sclose</i>	
<i>dis-miss</i>		<i>di-smiss</i>	

So likewise all Words that remain entire, when their *Prepositions* and *Terminations*, which of themselves signify nothing, are taken away from them, must be spelt by themselves; as *stand-ing*, not *stan-ding*, *reclaim-ed*, not *re-clai-med*, *unexpect-ed*, not *unexpect-ed*.

Thirdly, Any *Consonant* joined with *l* or *r* before *e*, in the End of a Word, is inseparable; as in the very Word *insepara-ble*, *tri-ple*, *Mi-trè*.

Fourthly, This Particle *es*, at the End of Words (which are commonly either *Nouns* of the *Plural Number*, or *Verbs* of the *third Person*) is generally swallowed up of the foregoing *Syllable*, and serves only to make it long; but sometimes indeed it makes a *Syllable* of itself.

Note.

The YOUNG MAN's Companion.

7

Note, A *Noun* is the Name of a Thing. A *Verb* is a Word that betokeneth to do, or to suffer, or to be. The *Singular* Number speaks but of one, the *Plural* of more. The *first Person* is when a Man speaks of himself, as *I come*. The *second* is when one speaks to another, as *Thou comest*. The *third* is spoken of, as *He comes*.

In the Words following it closes with the former Syllable.

Nouns.

Verbs.

An Hide,	Hides,	he hides himself.
A Drake,	Drakes,	he bakes Bread.
A Bile,	Biles,	he piles up Wood.
A Name,	Names,	he names me.
A Bone,	Bones,	he mones and weeps.
A Rope,	Ropes,	he copes with.
A Wire,	Wires,	he tires all Men.
A Brute,	Brutes,	he sutes well with it.
A Virtue,	Virtues,	he argues well.

But in these it may be a Syllable by it self.

A Grace,	Graces,	he places all Things.
A Church,	Churches,	he lurches Conies.
A Cage,	Cages,	he wages War.
An Hedge,	Hedges,	he judges none.
A Rose,	Roses,	} he poses Scholars.
A Nose,	Noses,	
A Fish,	Fishes,	he refreshes himself.
A Witness,	Witnesses,	he oppresses the Poor.
A Box,	Boxes,	he foxes the Guests.
Affize,	Affizes,	he freezes for Cold.

If Nouns in the final take s after them with an Apostrophe before it, it stands for *his*, as the *Pope's Eye*, or *the Eye of the Pope*; if without an Apostrophe, it makes the plural Number, as *Popes*.

Es is also founded long in these Words, *Alo es*, *Epitomes*; and in all proper Names, as *Mo-ses*, *Tha-res*, *Macca-bee*; except *James*.

If these Rules for dividing of Syllables seem too tedious and intricate, a little Practice and Observation will render them easy and familiar: In the mean Time take this for a general Direction, *That Syllables are so to be divided in Spelling, as they are in Speaking*; and be sure, if you cannot write a whole Word at the End of a Line, break it off at the End of a Syllable; as for Example, *Communi-* in one Line, and *cation* in the next, not *Communic-* in one Line,

and *ation* in the next; so if I should write *discharge*, at the End of a Line thus, *dischar-ge*, it would be ridiculous; for if I could not bring it in all, I ought to have left off after *dis*, and begun the next Line with the other Syllable *charge*.

Of LETTERS that ought to be written, and yet are not sounded, and the Reasons thereof; particularly of *e* at the End of a Word, when it must, and when it should not be written.

IN the Words *Isaac*, *Caiphas*, *Canaanite*, *Sabaoth*, and *Pharaoh*, one of the *a*'s is not pronounced, they being originally *Hebrew*.

B in Words of one Syllable is not sounded, as in *Lamb*, *climb*, *Comb*, *dumb*, *Tomb*, *Womb*, *Thumb*, *Debt*, *Detor*, *Doubt*: But as if written, *Lam*, *clim*, *Com*, *dum*, *Tom*, *Wom*, *Thum*, *Det*, *Detor*, *Dout*.

And *c* is not sounded in *indict*, *Indictment*, *indicted*. Nor *d* in *Wednesday*. Nor *e* in the Middle of the Word *George*. And *e* at the End of the Word is very seldom sounded, except in those of one Syllable, as *me*, *be*, *the*, *he*, *ye*, *we*, where it has the Sound of a Diphthong, or *ee*. And in Words derived from the *Hebrew* and *Greek*, as *Jesse*, *Jubile*, *Mamre*, *Ninive*, *Candace*, *Cloe*, *Daphne*, *Gethsemane*, *Penelope*, *Epitome*, *Catastrophe*, &c.

In other Words where *e* is put at the End, and the Sound not heard, yet it is not superfluous, nor to be omitted in Writing, for these following Reasons:

1. It serves to draw the Syllable long, which without must be sounded short, and so several Words of different Senses would be confounded, which, by this Means, are plainly distinguished; as appears by these Examples.

To curse and ban is Childrens Bane.

A Hedger's Bill is no fit Instrument wherewith to launce a Bile.

You may bite one Bit of my Apple.

I did bathe myself in a Bath.

I can break this Japan Cane.

A scolding Dame deserves to be duck'd in the Mill-dam.

Meat that is fetch'd far is Ladies Fare.

A Piece of Fir is good for the Fire.

I am out of the Hope to have one Hop this Year.

They say a Cat hath nine Lives, but to be sure she will live as long as she can see me alive.

Bad

Bad Usage hath made many a Man mad.

Let the Man cut my Horse's Main.

'Tis two Mile to the next Mill.

I will quit and discharge you quite of that Debt.

To rid the Way, let's ride the fester.

The Poor will scrape up every Scrap.

I cannot stare all Night at a Star.

For a new Tune I got a Tun of Wine.

Of times one Twin doth twine about the other.

For a Pint of Wine you do not win.

*Are you not asham'd to whine for a Scratch with a Whine,
or a Fuzz Buss?*

I will write to my Lawyer for a Writ.

Nay, this *e final* does not only draw out the Syllable after one Consonant, but sometimes effects the same after two; as in *finde, Minde, Winde, Rinde, linde, waste, Taste, Tiche, Childe*, which therefore ought to be so written, tho' it is now, seldom wrote in Words ending in *d*.

Yet these following Words seem privileg'd by Custom, to be pronounced long without an *e* in the End, viz. *bold, cold, hast, Post, told, Scold, Bolt, Colt, Dolt, most, Ghost, both, Ruth*: But in other Words it is a Self-contradiction to add an *e* in the End, which makes a Syllable long, after I have made it short with two Consonants; and therefore I must write *pass, turn, black*, not *passé, turne, blacke*.

2. Another Reason for writing *e final*, when not founded, is to soften the Sound of these two Letters *c* and *g*; as in *Ice, Place, Lice, Truce, Justice*; whereas otherwise *c* sounds strong like *k*, as in *ac-cept, ac-count*; and the like of *g*, as in *Stag and Stage, bug and buge, swing and swinge, String and Fringe*.

And here note, That if *g* be hard with a long Vowel, *ue* is added, and always pronounced in the same Syllable; as *Plague, Rogue, Prague, the Hague, Intrigue, Catalogue, Dialogue, Prologue, Epilogue, Synagogue, colloque, prorogue, League, Tongue*. Beware you do not read such Words, *Catalogue, Intri-gue*, nor write them *Catalog, Prolog, &c*:

But if *g* be short, with a short Vowel, then it must have *d* before it; as in *Badge, Ledge, Bridge, lodge, judge*; which Words are thereby differenced, both in Sound and Writing, from *Bag, Leg, Log, Jug*.

3. Another Use of *e* at the End of Words, is for Ornament rather than Necessity; for so we add it to Words end-

ing in *i*, *o*, or *u*, as *Charitie*, *Virtue*, *Foe*, where it does not vary the Sound, except after *i*. and there it makes the Syllable sound more gently, like the Diphthong *ee*, as *Charitie* is pronounced, as if it were written *Charitee*. Likewise in Nouns and Verbs singular it is generally added after the long *s*, joined with another Consonant; as *Horse*, *Curse*, to *nurse*, *disburse*; for we do not write, *Hors*, *Curs*, *disburs*; and I take the Reason to be partly, because those Words are thereby the more readily varied; as *Nurse*, *Nurses*, *Curse*, *Curfes*, *disburse*, *disburses*: And especially because the short *s* after *r*, without an *e*, makes a soft Sound, as *Wars*.

If to *e* at the End of a Word, a long Vowel be added, the *e* is lost, and must be omitted in Writing, as *love*, *loving*, not *loweing*; *doe*, *doing*, not *doeing*; except these Endings *ge* and *ce* before *able*, as *Change*, *change-able*, *Peace*, *peace-able*, not *chang-able*, *peac-able*.

It is needless to use *e* at the End of a Syllable already made long by a Diphthong, and therefore you must write, *gnaw*, *Fear*, *Weight*, not *gnawe*, *Feare*, *Weighte*; except when it is to give a right Sound to soft *s*, soft *th*, and to these Endings, *ce*, *ge*, *ve*; as *please*, *soothe*, *Peace*, *Siege*, *Leave*.

Words of one short Syllable, ending with a Consonant, are to be written with a single Consonant, and without any *e* after; as *Sin*, *Son*, *Sun*, *at*, *put*, *War*, not *Sinne*, *Sonne*, *Sunne*, &c. tho' yet such Words are writ in our old *Bibles*, and so too in the Plural, *Sinnes*, *Sonnes*, &c. But this is reform'd in our latter Impressions.

G is not sounded, tho' written in *sign* and its Compositions, *assign*, *resign*, *Design*, *consign*; nor in *Seignior*, *Bagnio*, *Seraglio*, *reign*, *Sovereign*, *arraign*, *Phlegm*, and the like.

H has Place, but no Voice, in *Authority*, *Christ*, *Christopher*, *Chrystal*, *Chrysostom*, *Chronicle*, *Chronology*, *Chronography*, *Ghost*, *John*, *Rhine*, *Rhenish*, *Rhetoric*, *Schedule*, *Schism*, and *Thomas*.

I is not much, if at all, sounded in these Words, *adiu*; *Juice*, *Pursuit*, *Bruit*, *Fruit*, *Suit*, *Bruise*; yet in the five last it draws the Syllable long.

K is not heard in *Back*, *Deck*, *sick*, *Rock*, *suck*, &c. For the *Latins* made the same Sound with *c* alone; as *Lac*, *nec*, *dic*, *hoc*, *duc*; and our best Authors do now write such Words, when deduced from the *Greek* or *Latin*, in *cus*, with

with *c* only, as *public*, *Physic*, *Catholic*. But if the Word come from the *Latin*, ending in *quus*, you must write *que*, as *oblique*, of *obliquus*, *Relique* of *Reliquus*, *antique* of *antiquus*; and *Fabrique* and *Traffique* from the *French*.

N is not pronounced in *solemn*, *Hymn*, *Autumn*, *Column*, *condemn*, &c. yet ought to be written, because it shews whence they are deduced.

O is not founded in *People*, *Jeopardy*, &c. nor in the End of *righteous*, *glorious*, *frivolous*, and the like.

Nor in the Words, *Isle*, *Viscount*, *Island*.

U is written many Times after *g*, when it has no Sound, as *Guide*, *Guardian*, &c. and always after *q*; as in *Queen*, *quick*, and the like. In the Words, *buy*, *built*, *Conduit*, *Circuit*, it is also silent; and so also in *Labour*, *Favour*, *Honour*, and other Words of like Ending.

I have been longer upon the Rule, that my young Learner may have full and plain Instruction, in relation to the true Knowledge of the Sound of those Letters which ought to be written; and particularly the Letter *e*, which, tho' the second *Vowel*, affords more Variety of Instruction, than any of the other: So that by following carefully the Observations I have made, the Learner will know when this significant Letter must, or must not, be written, at the End of a Word.

Of LETTERS sounding alike, and how to avoid Mistakes in Writing one for the other.

C and **k** have great Affinity in Sound; but to distinguish when you ought to use one, and where the other; Observe,

That *c* hath the Force of *k* only before *a*, *e*, *o*, *u*, and these two Consonants *l* and *r*. And therefore you must write, *Care*, *Cow*, *Cooper*, *Cupboard*, *Clergy*, *Crown*; not *Kare*, *Kow*, *Kooper*, *Kupboard*, *Klergy*, *Krown*. But before *i* and *y*, *c* has commonly the Sound of *j*; as *Cesar*, *Cicero*, not *Resar*, *Kicero*: And the Use of *k* is only before *e*, *i*, and *n*; as *Key*, *keep*, *kill*, *Knight*; not *Cey*, *ceep*, *cill*, *Cnight*. And for this Reason too, we ought to write *Calendar*, *Catharine*, *Catholic*; not *Kalendar*, *Katharine*, *Katholic*, altho' these two last come of Greek Words written with *Kappa*.

In short Syllables you must write *c* before *k*, if a Vowel

12. The YOUNG MAN's Companion.

goes before, as *Bucks, thick, Stick*, and the Reason I told you a little before, *viz.* because *k* is never doubled; but if a Consonant come before *k*, there is then no Need of *c*, as *Banks, Barks*; not *Bancks, Barcks*.

C is to be written after *x*, in some Words derived from the *Latin*, as *exceed, excel, excessive*; not *exced, exel*.

Ch in mere *English* Words, or such as are derived from the *French* and *Latin*, sounds *chie*, as in *Approach, Charity*; and if the Syllable be pronounced short, you must write *t* before the *ch*; as *Catch, Wretch, Scutcheon*. But in the following Words borrowed from *Hebrew* and *Greek*, *ch* has the Sound of *k*; as in *Character, Malachi, Antioch, Eucharist, Anchor, Chios, Chushite, Achan, Malchus, Melchizedec, Baruch*; and must be read as if they were wrote *Karakter, Akan, Antiock, Baruk, &c.*

And the same in all other like Words, except these, *Rachel*, (not *Rakel*) *Cherubim, Tychicus*, (not *Tykicus*) *Archbishop, Archduke*; yet these two Words *Architect* and *Archangel*, are pronounced as if they were spelt *Arkitect, Arkangel*; and the Reason I conceive to be, because in the two last a Vowel, but in the former a Consonant follows.

F and *ph* will not be mistaken, if it be remembered that the first is used in all *English* Words, as *Face, find, &c.* The latter in these few following, derived of the *Greek* and *Hebrew*.

Phanatick	Phantasy	Phlebotomy	Phlegm
	(for which we commonly use <i>Fancy</i>)		
Pharaoh	Philtre	Phrenetick	Triumph
Pharisee	Philistines	Physic	not
Pharex	Philosophy	Physician	
Phoenix	Phrensy	Physiology	Triumph.

Beware therefore of writing these Words with an *f*, for it would be equally as absurd to see *Filosofy, Fysician*, for *Philosophy, Physician*, as it would be to behold *Phastening, phind, Phigure*, instead of *Fastening, find, Figure*.

Gh in the End of some few Words, where *au* or *ou* goes before, has the Sound of *f*, as *laugh, cough, tough, enough*; yet have a Care you do not make your Readers Sport, by writing *lass, coff, tuff, and enuff*; because Custom has not yet allowed thereof; yet *cuff, Snuff, buff, Buff, &c.* must be so written.

G before *e* and *i* is sounded soft like *j* Consonant, as *Agent, George, Gentle, Gem, Generosity, Generation, Gender, Genealogy,*

The YOUNG MAN's Companion. 13

Genealogy, Geometry, Gesture, Giant, Ginger, Gipsy, imagine; do not play the Fool, and write *Ajant, Jeneration, Finger*, &c. Yet we must write *Ajax, January, Janizaries, jealous, John, jeer*; not *gealous, Gohn, geer*.

C has many Times the Sound of *s*; to distinguish them, take these Rules:

1. You must write *c* before *e* or *i*, as in *accept, special, Circumcision, exceed*, being Words derived from the *Latin*, where *c* must be retained.

2. Words that end with the Sound of *ace, ecc, ice, uce*, are generally wrote with *c*; as *Mace, Piece, Lice, induce*. So also Words in *ance, ence, ince, once, unce, any, or ency*; as *Countenance, Prudence, Quince, Scount, Dunce, Lieutenantcy, Continuancy*; not *Countenans, Contiguansy, or the like*. Except out of this Rule these Words

Abase	To advise	Frankincense	Rinse
Case	Hypocrisy	Incense	Sins
Base	Paradise	To advertise	Pens
Chase	Promise	Mittins	Sense.

3. Words ending in the Sound of *ose, use*, (long) must be wrote with *s*, as *Hose, Nose, abuse, chuse*.

4. *C* sounds like a soft *s*, in these Words, *sacrifice, suffice*; and in *Gloucester* and *Worcester* the *ce* is not at all founded in common Speech, yet must not be left out in Writing.

5. As for the Beginning of Words, these following, tho' they have the Sound of *s*, yet must be written with *c*.

Cease	Censure	Cistern	Cite, and its
Ceilings	Circumstance	Cider	Compounds
Celebrate	Circumference	Cinque	Excite
Celerity	Censor	Cinnamon	Recite, &c.
Celestial	Centre	Cypher	City
Cell	Centurion	Circle	Civil
Cellar	Ceremony	Circuit	Civet
Cement	Certain	Citron	Cymbal
Censer	Certify		Cypress

All other Words (as near as I can remember) of that Sound, must begin with *s*, as *Sack, Senate, sob, Sum*, &c.

6. There are seven Words (I can think of no more at present) beginning with *sce, sci, sch, and sebi*, which ought to be taken notice of, to prevent their being written wrong, as they seem to sound with an *s* only; and they are, *Scene, Scepter, Schedule, Schism, Science, Sciatica, Scythians*; which
you

you must read as if they were wrote, *Sene, Septer, Sedule*; yet *Scheme* and *Skeleton* are always sounded as *Skeme, Skele-ton*; so *Scarcity, Scholar, Scrivener, &c.*

Ti, before a Vowel, generally sounds like *fi*, as *Patience, Dictionary*, except when *s* goes before, as *Fustian, Combustian*. And except the Word *tied*, and whenever a Word ending in *ty*, hath another Syllable added to it that begins with a Vowel, as from *Plenty, Plentious; Mighty, Mightier*.

Therefore since the same Sound is frequently to be expressed by *ti*, and sometimes by *fi*, especially in the End of Words, it will be worth while to understand them, and where, properly to use each, and the Reason thereof. For your Guidance herein, be pleased to observe these Directions.

1. Generally you must write *ti*, not *fi*, in Words that end with the Sound of *ation, etion, ition, otion, ution*, as *Education, Completion, Contrition, Motion, Constitution*; as also, in those that end in *action, ection, ietion*, as *Faction, Resurrection, Contradiction*; except where there is a double *s*, as *Passion*, or an *ss*, as *Cushion, Fashion*; not *Cution, Fation*. But more particularly,

2. You are to know that the Reason of the different Writing of such like sounding Words is this; they are all originally *Latin* Verbals derived from the first Supine, which if it end in *tum*, then you write *ti*; if in *sum*, then *fi*. However, because all People are not acquainted with *Supines*, I shall here set down those Words of both Sorts that most frequently occur.

These are to be written with t.

These with f.

Action	Injunction	Admission	Descension
Ambition	Motion	Allusion	Diversion
Apparition	Munition	Apprehension	Effusion
Attention	Nation	Ascension	Evasion
Benediction	Notion	Aspersion	Invasion
Compunction	Oblation	Aversion	Occasion
Concoction	Obligation	Circumcision	Permission
Contention	Perdition	Commission	Submission
Declamation	Perturbation	Confusion	Vision
Dissention	Relation	Dismission	
Distribution	Sanction	And the like of any others where there is the same Reason.	
Exclamation	Toleration		
Faction	Vacation	To which you may add, <i>Grasier, Brasier, Visier.</i>	
Fruition	Vocation		

A TABLE of Words, the same, or nearly alike in Sound, but different in Signification.

A BEL, Cain's Brother	<i>Arose</i> , did rise
<i>A Bell</i> , of Metal	<i>Arrant</i> , notorious
<i>Able</i> , powerful	<i>Errand</i> , a Message
<i>Accidence</i> , a Book	<i>Arras</i> , Hangings
<i>Accidents</i> ; Chances	<i>Arrows</i> , to shoot
<i>Account</i> , Esteem	<i>Harrafs</i> , to trouble
<i>Accomp</i> , Reckoning	<i>A Scent</i> , Smell
<i>Achor</i> , a Valley	<i>Ascent</i> , going up
<i>Acre</i> , of Land	<i>Assent</i> , Agreement
<i>Advice</i> , Counsel	<i>Assistance</i> , Help
<i>Advise</i> , to counsel	<i>Assistants</i> , Helpers
<i>Ale</i> , Malt Liquor	<i>Augur</i> , a Sooth-sayer
<i>All</i> , to trouble	<i>Auger</i> , for Carpenters
<i>All</i> , every one	<i>Axe</i> , to cut Wood
<i>Aawl</i> , to bore Holes	<i>AAs</i> , of Parliament
<i>Ale-boof</i> , an herb	<i>Babel</i> , the Tower
<i>Aloof</i> , at a Distance	<i>Babble</i> , to prate
<i>Allay</i> , to give Ease	<i>Bacon</i> , Hog's Flesh
<i>Alloy</i> , of Metal	<i>Beckon</i> , to call by Signs
<i>Alley</i> , a narrow Passage	<i>Bail</i> , a Surety
<i>Ally</i> , a Confederate	<i>Bale</i> , of Cloth or Silk
<i>A Lye</i> , a Falsity	<i>Bald</i> , without Hair
<i>Allow'd</i> , granted	<i>Bawl'd</i> , cry'd out aloud
<i>Aloud</i> , noisy	<i>Ball</i> , a round Substance
<i>Altar</i> , for Sacrifice	<i>Bawl</i> , to cry aloud
<i>Alter</i> , to change	<i>Barbara</i> , a Woman
<i>Amis</i> , wrong	<i>Barbary</i> , a Country
<i>A Misi</i> , a Whore	<i>Barberry</i> , Fruit
<i>Ant</i> , a Pismire	<i>Bare</i> , naked
<i>Aunt</i> , Father's Sister	<i>Bear</i> , a wild Beast
<i>A Peal</i> , Ringing	<i>Barriſter</i> , at Law
<i>Appeal</i> , to higher Powers	<i>Barretor</i> , a Disturber
<i>A Peer</i> , Lord	<i>Raſs</i> , a Part of Muſick
<i>Appear</i> , to be ſeen	<i>Baſe</i> , mean or wicked
<i>Air</i> , Wind	<i>Baiz</i> , Cloth
<i>Are</i> , they are	<i>Bays</i> , Bay Trees
<i>Aray</i> , good Order	<i>Be</i> , are
<i>Array</i> , to cloath	<i>Bee</i> , with Honey
<i>A Roſe</i> , to ſmell to	<i>Belly</i> , Part of the Body
	<i>Belie</i> ,

Cymbal, an Instrument
Symbol, a Mark
Cypress, a Tree
Cyprus, an Island
Cruise, a little Vessel
Cruise, by the Sea-Coast
Cygnat, a young Swan
Signet, a Seal
Daign, to vouchsafe
Dane, of Denmark
Dam, to stop
Damn, to condemn
Dear, of great Value
Deer, in a Park
Deceased, dead
Diseased, sick
Decent, becoming
Descent, going down
Disint, to disagree
Deep, low in the Earth
Diep, a Town in France
Defer, to put off
Differ, to disagree
Derbe, a City in Asia
Derby, in England
Desert, Merit
Desart, Wilderness
Dew, from Heaven
Due, a Debt
Do, to make
Doe, a Female Deer
Dough, Paste or Leaven
Done, acted
Don, a Spanish Lord
Dun, Colour
Devices, Inventions
Devizes, a Town
Doer, that doth
Door, of an House
Dragon, a Beast
Dragoon, a Soldier
Draught, of Drink
Drought, a Driness

Ear, of the Head
E'er, ever
Year, twelve Months
Earth, the Ground
Hearth, of a Chimney
Easter, a Feast
Esther, a Woman
Eaton, devoured
Eton, a Town's Name
Eminent, famous
Imminen, over-head
Enow, in Number
Enough, in Quantity
Enter, go in
Interr, to bury
Entire, whole
Envy, Hatred
Envoy, a Messenger
Exercise, Labour
Exorcise, to conjure
Extant, in Being
Extent, Distance
Fain, desirous
Feign, to dissemble
Faint, weary
Feint, a false March
Fair, comely
Fare, a customary Hire
Feed, to eat
Fee'd, rewarded
Fellon, a Whitlow
Felon, a Criminal
Figure, Shape
Vigour, Strength
File, of Metal
Foil, to overcome
Filip, with a Finger
Philip, a Man's Name
Fir, Wood
Furr, of a Skin
Floor, of a Room
Flower, of the Field
Follow, to come after
Fallow,

18 *The YOUNG MAN's Companion.*

<i>Fallow</i> , Ground untill'd	<i>Heart</i> , the Seat of Life
<i>Forth</i> , abroad	<i>Haven</i> , a Harbour
<i>Fourth</i> , in Number	<i>Heaven</i> , Happiness
<i>Foul</i> , nasty	<i>Herd</i> , of Cattle
<i>Fowl</i> , a Bird	<i>Heard</i> , did hear
<i>Forum</i> , to sit on	<i>Hard</i> , difficult
<i>Form</i> , Shape	<i>Here</i> , in this Place
<i>Francis</i> , a Man's Name	<i>Hear</i> , to hearken
<i>Frances</i> , a Woman's Name	<i>Hie</i> , to make haste
<i>Frays</i> , Quarrels	<i>High</i> , lofty
<i>Froise</i> , fry'd Meat	<i>Hoy</i> , a Ship
<i>Gall</i> , bitter Substance	<i>Him</i> , that Man
<i>Gaul</i> , a Frenchman	<i>Hymn</i> , a Song
<i>Garden</i> , of Herbs	<i>Hire</i> , Wages
<i>Guardian</i> , Overseer	<i>Higher</i> , more high
<i>Gentel</i> , graceful	<i>His</i> , of him
<i>Gentile</i> , Heathen	<i>Hiss</i> , to deride
<i>Gentle</i> , quiet	<i>Hoar</i> , Frost
<i>Gesture</i> , Carriage	<i>Whore</i> , a lewd Woman
<i>Jester</i> , a merry Fellow	<i>Hole</i> , Hollowness
<i>Gilt</i> , with Gold	<i>Whole</i> , perfect
<i>Guilt</i> , of Sin	<i>Ho! lo!</i> to call
<i>Glutinous</i> , sticking	<i>Hallow</i> , to make holy
<i>Gluttonous</i> , greedy	<i>Hollow</i> , empty
<i>Grate</i> , for Coals	<i>Holy</i> , pious
<i>Great</i> , large	<i>Wholly</i> , entirely
<i>Grater</i> , for Nutmeg	<i>Home</i> , a Dwelling Place
<i>Greater</i> , larger	<i>Whom?</i> what Man
<i>Greave</i> , a Boot	<i>Holm</i> , a Sort of Oak
<i>Grieve</i> , to lament	<i>Hoop</i> , for a Tub
<i>Grays</i> , a Town	<i>Whoop</i> , to cry out
<i>Graze</i> , to eat Grass	<i>Hue</i> , Colour
<i>Groan</i> , to sigh	<i>Hew</i> , to cut
<i>Grown</i> , increased	<i>Hugh</i> , a Man's Name
<i>Grot</i> , a Cave	<i>I</i> , myself
<i>Groat</i> , four Pence	<i>Eye</i> , to see with
<i>Hail</i> , to salute	<i>Idle</i> , lazy
<i>Hale</i> , to draw along	<i>Idol</i> , an Image
<i>Hare</i> , in the Field	<i>I'll</i> , I will
<i>Hair</i> , of the Head	<i>Ile</i> , an Island
<i>Harsh</i> , cruel	<i>Oyl</i> , of Olives
<i>Hash</i> , to mince Meat	<i>Impley</i> , Work
<i>Hart</i> , a Beast	<i>Impley</i> , to signify

In, within	Low, humble
Inn, for Travellers	Loss, to suffer Loss
Incite, to stir up	Loose, to let go
Insight, Knowledge	Lower, to let down
Ingenious, of quick Parts	Lower, to frown
Ingenuous, candid	Made, finished
Ketch, a Ship	Maid, a young Woman
Catch, to lay hold of	Main, the chief Thing
Kill, to murder	Mane, of a Beast
Kiln, for Bricks	Male, the He
Kind, good-natur'd	Mail, Armour
Knave, a Cheat	Manner, Custom
Nave, of a Cart Wheel	Manour, a Lordship
Knight, by Honour	Market, for Traffick
Night, the Evening	Mark it, mind that
Lade, the Water	Marsh, watry Grounds
Laid, plac'd	Mash, the Hole of a Net
Lain, did lie	Martin, a Man's Name
Lane, a narrow Passage	Marten, a Bird
Latin, old Roman	Mead, a Meadow
Latten, Tin	Mede, one of Media
Lattice, of a Window	Mean, of low Value
Leticia, a Woman's Name	Mien, Carriage
Lettuce, an Herb	Meat, to eat
Lease, a Demise	Mete, to measure
Leash, three	Message, Business
Lees, Dregs of Wine	Messuage, an House
Leper, one leprous	Mews, for Hawks
Leaper, that leapeth	Muse, to meditate
Lessen, to make less	Mighty, powerful
Lesson, a Reading	Moiety, half
Left, for Fear	Mile, by Measure
Least, smallest	Moil, to labour
Letbargy, Sleepiness	Mite, small Money
Liturgy, Common Prayer	Might, Strength
Lier, in wait	Might, he could
Lyar, a Teller of Lies	Moat, a Ditch
Limb, a Member	Mote, in the Eye
Limn, to paint	More, in Quantity
Line, Length	Mower, that mows
Loyn, of Veal	Moor, barren Ground
Lo, behold	Moor, a Blackamoor
	Morter, made of Lime
	Mortar,

Mortar, to pound in
 Naught, bad
 Nought, nothing
 Nay, not
 Neigh, as a Horse
 Neither, lower
 Neither, none of the two
 Nice, curious
 Noise, Clamour
 Nigh, near
 Nye, a Surname
 Not, denying
 Knot, to untie
 Oar, of a Boat
 O'er, over
 Ore, of Metal
 Of, belonging to
 Off, at a Distance
 Ob, alas
 Owe, to be indebted
 Own, to acknowledge
 Own, as his own
 Order, Rank
 Ordure, Filth
 Our, of us
 Hour, sixty Minutes
 Palate, of the Mouth
 Pallet, a little Bed
 Pale, Colour
 Pail, a Vessel
 Pall, a Funeral Cloth
 Paul, a Man's Name
 Parasite, a Flatterer
 Parricide, a Murderer
 Parson, of a Parish
 Person, somebody
 Peal, upon the Bells
 Peel, the Outside
 Pear, a Fruit
 Pair, a Couple
 Pare, to cut
 Peter, a Man's Name
 Petre, Salt
 Pick, to chuse
 Pique, a Quarrel
 Pint, half a Quart
 Point, a Stop
 Place, of Abode
 Plaise, a Filth
 Plow, to make a Furrow
 Plough, to plow with
 Pole, a long Stick
 Poll, to cut the Hair
 Pore, of the Skin
 Poor, beggarly
 Posy, of Flowers
 Poesy, Poetry
 Pour, to empty
 Power, Might
 Practise, to exercise
 Practice, Exercise
 Pray, to beseech
 Prey, a Booty
 Presence, being here
 Presents, Gifts
 Presents, he gives
 Prince, King's Sons
 Princess, King's Daughter
 Principal, Chief
 Principle, the first Rule
 Profit, Advantage
 Prophet, a Foreteller
 Prophecy, Foretelling
 Prophecy, to foretel
 Quire, of Paper
 Choir, of Singers
 Rack, to torment
 Wreck, of a Ship
 Rain, Water
 Reign, rule as a King
 Rein, of a Bridle
 Raise, to set up
 Rays, Sun Beams
 Race, to run
 Rase, to demolish
 Red, a Colour

Read, did read
 Reed, a Shrub
 Read, in a Book
 Relick, a Remained
 Relict, a Widow
 Rere, the back Part
 Rear, to erect
 Rhyme or Rhythm, in Verse
 Rime, a freezing Mist
 Rice, Indian Corn
 Rile, Advancement
 Rie, Corn
 Rye, in Suffex
 Wry, crooked
 Ring, the Bells
 Wring, the Hands
 Rite, Ceremony
 Right, just and true
 Wright, a working Smith
 Write, with a Pen
 Rode, did ride
 Road, the Highway
 Row'd, did row
 Roe, a Kind of Deer
 Row, a Rank
 Rome, a City
 Room, Part of a House
 Role, by Heart
 Wrote, did write
 Wrought, work'd
 Rough, not smooth
 Ruff, a Band
 Roof, Top of a House
 Sail, of a Ship
 Sale, bargaining
 Satiety, Fullness
 Society, Company
 Saviour, that saveth
 Savour, a Smell
 Savor, a Taste
 Scene, of the Stage
 Seen, beheld
 Seas, great Waters

Seize, to lay hold of
 Cease, to leave off
 Sent, ordered away
 Scent, a Smell
 Shew, to make appear
 Shoe, for the Foot
 Show, a Sight
 Ship, for Sailing
 Sheep, a Beast
 Shore, the Sea-Coast
 Sewer, the Common Sewer
 Shewn, did show
 Shone, did shine
 Shread, to mince
 Shred, minced
 Sign, a Token
 Sine, in Geometry
 Site, Situation
 Cite, to summon
 Sight, Seeing
 Sink, to go down
 Cinque, five
 Slight, to despise
 Sleight, Dexterity
 Sloe, a four Fruit
 Slow, tardy
 Slough, a Puddle
 Soal, of a Shoe
 Soul, of a Man
 Sole, a Fish
 Some, a Part
 Sum, the Whole
 Son, a Man Child
 Sun, the heavenly Light
 Soon, quickly
 Swoon, to faint
 Sore, an Ulcer
 Soar, to mount upward
 Stare, to look earnestly
 Stair, a Step
 Stear, a young Bullock
 Steer, to guide a Ship
 Stile, for Passage

Style,

Style, of Writing
Stood, did stand
Stud, an Embossment
Straight, not crooked
Strait, narrow
 Succur, Help
Sucker, a young Twig
Sue, to make Suit
Sew, with a Needle
Tail, the End
Tale, a Story
Tame, not wild
Thame, a Town
Tare, Weight allowed
Tear, to rend in Pieces
Than, in Comparison
Then, at that Time
There, in that Place
Their, of them
Through, thorough
Throw, to cast
Throne, Seat of State
Thrown, cast
Tie, to make fast
Toy, a Play-Thing
Tide, Flux of the Sea
Ty'd, made fast
Tile, for Covering
Tail, to take Pains
Time, when
Thyme, an Herb
To, unto
Toe, of the Foot
Tow, to draw along
Too, likewise
Two, a Couple
Told, as a Tale
Toll'd, as a Bell
Tongs, for the Fire
Tongues, Languages
Towr, to hang in Sight
Tower, of Defence
Tuscan, Order

Tuskin, a great Tooth
Vacation, ceasing
Vocation, a Calling
Veil, a Covering
Veal, Calf's Flesh
Vale, a Valley
Vain, useless
Vane, to shew the Wind
Vein, of the Blood
Valley, a Dale
Value, Worth
Volley, of Shot
Vassal, a Slave
Vessel, for Use
Vial or *Pial*, a Glass
Viol, for Musick
Vice, ill Habit
Vise, for a Workman
Voice, a Sound
Use, Use
Ewer, a Bason
Your, of you
Use, to be wont
Ewes, Sheep
Wade, to go into Water
Weigh'd, in the Balance
Wail, to mourn
Whale, a Sea Fish
Wain, to decrease
Wean, a Child
Wait, to look for
Weight, Heaviness
Ware, Merchandize
Wear, to put on Cloaths
Where, in what Place
Were, they were
Waste, to spend
Waist, the Middle
Way, to walk in
Wigh, to poize
Wey, forty Bushels
Weal, good
Wbeal, a Pimple

Wbeel,

Wheel, of a Coach
Wield, to manage
Wild, untamed
Wen, a Swelling
When, at what Time
Wet, watery
Whet, to sharpen
What, which
Wat, Walter
While, in the mean Time
Wile, a Trick
Whore, a lewd Woman
Woer, a Suiter
Wight, an Island
White, a Colour

Wise, knew
Whist, Silence
Woe, Misery
Who, which
Wood, of Trees
Would, was willing
Yarn, Woollen
Earn, to get
Yern, to have Pity on
Ye, yourselves
Yea, yes
Yew, a Tree
Ewe, a Sheep
You, yourself.

Of the POINTS, or STOPS, and other MARKS used in Writing and Reading; with their Characters, Places, and Signification.

DUE Pointing is very necessary in Writing, to prevent Confusion, and assist the Reader, both as to a right Pronunciation, by the Raising and Falling of the Voice; and also to the more easy and distinct Apprehension of the Sense, and is of no less Use to others, who shall hear us read, or see our Writing.

The four principal Points or Stops appertaining to a Sentence are,

1. A Comma, which is mark'd thus (,)
2. A Semicolon thus (;)
3. A Colon thus (:)
4. A Period, or full Stop, at the End of a Sentence,

thus (.)

[,] Example of the Comma.

It is not the bare Act, but the Intention of it, that makes it virtuous, or vicious.

At each of the Comma's in the above-mentioned Sentence, you are to stop, whilst you may leisurely tell one.

[;] Example of the Semicolon.

In the Scripture, the Ignorant may learn all useful Knowledge; and the Knowing may learn to discern their own Ignorance.

In this Sentence, you are to stop at the Semicolon at the Word *Knowledge*, whilst you may count two.

[:] Ex-

[:] Example of the Colon.

It may be a less Evil to commit Sin, and not love it, than to love Sin, and not so frequently to commit it : The former argues Weakness of Grace ; but the other the Corruption of Nature.

At the Colon in this last Sentence, after the Word *it*, you are to stop whilst you may count three.

[.] Example of the Period, or full Stop.

Ignorance makes a Man conceited ; and Conceitedness makes him the Jest of Society.

Here, at the Point after *Society*, you are to stop till you can count four, before you read any farther.

An Example of these four Stops or Points we have, Psalm cxli. 5. *Let the Righteous smite me, it shall be a Kindness ; and let him reprove me, it shall be an excellent Oil, which shall not break my Head : For yet my Prayer also shall be in their Calamities.*

How strangely would this Text appear, if any one should write it thus — *Let the Righteous smite me it, shall be a Kindness and let ; him reprove me it shall, &c.*

A Note of Exclamation or Admiration is mark'd thus (!)

Example. *Oh the Depth of the Riches !*

A Parenthesis, which includes some additional or explanatory Words in a Sentence, is made thus ()

Example. *For I know in me (that is, my Flesh) dwelleth no Good.* But this, among the best Authors, is now as much as possible avoided.

When a Question is asked, you are to make a crooked Mark over the Period thus (?) which is called a Note of Interrogation.

Example. *Who would be desirous of Riches, did he but consider the Evils which attend them ?*

(') Apostrophe, is a Comma at the Head of Letters, signifying some Letter or Letters left out for quicker Pronunciation ; as *I'll* for *I will*, *would'st* for *wouldest*, *shant* for *shall not*, *ne'er* for *never*, *is't* for *is it*, *'tis* for *it is*, *i'th'* for *in the*, *o'er* for *over*. It is also used to denote a Genitive Case, as *my Father's Land*, *my Wife's Son* ; for *Land of my Father*, *Son of my Wife*.

(..) Diæresis, is a Mark made to denote the Parting of two Vowels, which otherwise might seem to make a Diphthong, and is set over the latter Vowel, as in the very Word *Diæresis*, *Gilead*, &c. of which we have occasionally spoken before.

(-) Hy.



Moral Distichs
I N
Round-hand and Italian.

*Devotion is the soul's securest guard,
And conscious Virtue is its own reward.*

*From science only true content can flow
For 'tis a God-like attribute to Know.*

*Beauties, like princes, from their very youth
Are perfect strangers to the voice of Truth.*

*In beauty, the least faults conspicuous grow,
Each speck at the first glance, is seen on snow.*

1

N^o

I

II

III

IV

V

VI

VII

VIII

IX

X

XI

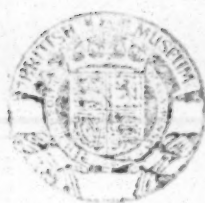
XII

XIII

*The ALPHABET in the
Roman AND Italick
CHARACTERS.*

N. ^o	Roman	Italic.	N. ^o	Roman	Italic.
I	Aa	<i>Aa</i>	XIV	Nn	<i>Nn</i>
II	Bb	<i>Bb</i>	XV	Oo	<i>Oo</i>
III	Cc	<i>Cc</i>	XVI	Pp	<i>Pp</i>
IV	Dd	<i>Dd</i>	XVII	Qq	<i>Qq</i>
V	Ee	<i>Ee</i>	XVIII	Rr	<i>Rr</i>
VI	Ff	<i>Ff</i>	XIX	Ss	<i>Ss</i>
VII	Gg	<i>Gg</i>	XX	Tt	<i>Tt</i>
VIII	Hh	<i>Hh</i>	XXI	Uu	<i>Uu</i>
IX	Ii	<i>Ii</i>	XXII	Vv	<i>Vv</i>
X	Jj	<i>Jj</i>	XXIII	Ww	<i>Ww</i>
XI	Kk	<i>Kk</i>	XXIV	Xx	<i>Xx</i>
XII	Ll	<i>Ll</i>	XXV	Yy	<i>Yy</i>
XIII	Mm	<i>Mm</i>	XXVI	Zz	<i>Zz</i>





The ALPHABET in the *Round-hand & Italian.*

N ^o	Roundh. ^d	Italian.	N ^o	Roundh. ^d	Italian
1	Aaa	Aaa	14	Nnn	Nnn
2	Bbb	Bbb	15	Oooo	Oooo
3	Cccc	Cccc	16	Ppp	Ppp
4	Ddd	Ddd	17	Qqq	Qqq
5	Eeee	Eeee	18	Rrr	Rrr
6	Ffff	Ffff	19	Sss	Sss
7	Ggg	Ggg	20	Ttt	Ttt
8	Hhh	Hhh	21	Uu	Uu
9	Iiü	Iiü	22	Vvv	Vvv
10	Jjÿ	Jjÿ	23	Ww	Ww
11	Kkk	Kkk	24	Xxx	Xxx
12	Lll	Lll	25	Yyy	Yyy
13	Mm	Mm	26	Zzz	Zzz

A B C D

E F G H

I K L M

N O P Q

R S T U

V X Y Z



7-)
the fan
writ in
ther :
pound
Kind
not to

Ecl
Part
Begin

Begin
Auth

(
ral S
Chap

(
point

(
(
Disc

(
Stre

(
thor

(
but

long

(
to f

flex

of

wil

T
by

W

(.) Hyphen, a Note either of joining the Syllables of the same Word, when one or more of them happen to be writ in one Line, and the rest, for want of Room, in another : Or else divides the several integral Parts of a compounded Word, as *Hand-granadoes*, *Fire-shovel*. In which Kind of Composition our Language is second to none ; no, not to the copious *Greek* itself.

Eclipsis, is a Piece of a Line drawn to denote that some Part of a Verse or Sentence cited, is left out, either at the Beginning or End ; as,

————— *'Tis still the Miser's Lot ;*
The young Fool spends all the old Knave got.

(") Quotation, or double Comma reverse, is used at the Beginning of the Line, and shews what is quoted from an Author to be in his own Words.

(¶) Paragraph, denotes a Division comprehending several Sentences under one Head, and is used in subdividing a Chapter or Book into lesser Parts or Portions.

(☞) Index, is a Note like a Hand, with the Fore-Finger pointing out at something that is remarkable.

(†) Obelisk, is a Mark of Reference to the Margin.

(§) Section, denotes the Beginning of a new Head or Discourse.

(˘) Accent, is placed over a Vowel, to denote that the Stress or Sound in Pronunciation is on that Syllable.

(˘) Breve, over a Vowel, shews it must be sounded short, quick, and brisk.

(^) Circumflex, is of the same Shape with the Caret, but is placed over some Vowel to shew the Syllable to be long, as *Euphrates*.

(A) To the above add that which is called Caret, that is to say in *English*, it is wanting, mark'd as a *Latin* Circumflex, which is to shew where a Word forgotten in the Hurry of Writing, and placed above the Line, is to come in.

And so much for Pointing ; which carefully observed, will add Grace and Credit to your Writing.

Of ABBREVIATIONS.

TO be ready in these, shews a Dexterity in Writing ; and is very necessary for Dispatch of Business. For by them we expeditiously express, or set down a long Word, shortening it, by making some Initial Letter or
C Letters

26 *The YOUNG MAN's Companion.*

Letters belonging to the Word, to express it; as in the TABLE following.

A. B. Artium Baccalaureus, or Batchelor of Arts	C. P. S. Custos Privati Sigilli, or Keeper of the Privy Seal
Abp. Archbishop	Dr. Doctor or Debtor
Acct. Account	D ^o Ditto
A. D. Anno Domini, or the Year of our Lord	D. Denarii, or Pence
A. M. Anno Mundi, or the Year of the World	Dec. or xber, or 10ber, De- cember
Admsr. Administrators	Devon. Devonshire
A. M. Artium Magister, or Master of Arts	Decd. Deceased
Ana. of each a like Quantity	Doct. Doctrine
Ap. Apostle	D. D. Doctor of Divinity
Adml. Admiral	E. g. Exempli gratiâ, or for Example
Agt. Against	Esq; Esquire
Amot. Amount	Exon. Exeter
Aug. August	Feb. February
A. R. Anno Regni, or in the Year of the Reign	Gent. Gentleman
B. A. Batchelor of Arts	Hund. Hundred
B. D. Batchelor of Divinity	i. e. id est, or that is
B. V. Blessed Virgin	I. H. S. Jesus Hominum Sal- vator, or Jesus Saviour of Men
Bart. Baronet	Inst. Instant
Bp. Bishop	Jan. January
C. Chapter	Jno. John
Cant. Canterbury	Knt. Knight
Cent. Centum or Hundred	L. Libræ, or Pounds
Chan. Chancellor	Lieut. Lieutenant
Chap. Chapter	L. L. D. Legum Doctor, or Doctor of Laws
Capt. Captain	Mar. March
Cl. Clericus or Clerk	M. A. Master of Arts
Co. Company	Maj. Majesty
Col. Colossians, Colonel	Monf. Monsieur
Comrs. Commissioners	Mr. Master
Con. Constance	Mrs. Mistress
Cr. Creditor	M. D. Medicinæ Doctor, or Doctor of Physick
C. C. C. Corpus Christi Col- lege	M. S. Memorizæ Sacrum, or Sacred
C. S. Custos Sigilli, or the Keeper of the Seal	

Sacred to the Memory ;	Rob. Robert
also Manuscript	Reg. Prof. Regius Professor
N. Note	Rt. Hon. Right Honourable
N.B. Nota bene, Note, mark	S. A. Secundum Artem, or
well, or observe	according to Art
N. S. New Stile	St. Saint
No. Number	Sect. Section
n. l. non liquet, or it does	Sept. or 7ber, September
not appear	Serj. Serjeant
Nov. or 9ber, November	Serv. Servant
Obj. Objection	Salop. Shropshire
O. W. Old Word	Sr. Sir
O. S. Old Stile	ss. Semissis, or half a Pound
Oct. or 8ber, October	S. S. T. P. Sacro-sanctæ The-
Oxon. Oxford	ologia Professor, or Profes-
Pd. paid	for or Doctor of Divinity
p. per, or by	The. Theophilus
per Ct. per Centum, or by	Tho. Thomas
the Hundred	V. Verse
Parl. Parliament	Viz. Videlicet, or to wit, or
Philom. Philomathes, or Lo-	that is to say
ver of Learning	Will. or Wm. William
Philo-Math. Philo Mathe-	Wp. Worship
maticus, or a Lover of	Xn. Christian
Mathematicks	Xt. Christ
P. S. Postscript	Xtopher. Christopher
Q. Question	y ^e the
q. d. quasi dicat, or as if he	y ⁿ then
should say	y ^o you
q. l. quantum libit, or as	y ^m them
much as you please	y ^t that
q. f. quantum sufficit, or a	y ^r your
sufficient Quantity	Z. Zeal
qr. Quarter, or a Farthing	&c. & cætera, or and the
Rev. Reverend	rest, or and such-like

DIRECTIONS for young Practitioners in Writing, by Way of Introduction.

WRITING will never look Ornamental without a due Proportion of the Characters throughout the Whole, a just Distance between the Letters themselves as well as the Words, a natural Inclination of one Letter to another,

28 *The YOUNG MAN's Companion.*

another, and a smooth Stroke perform'd with Boldness and Freedom.

The Proportion of Letters is regulated by the O and N, therefore practise them first in a large Character.

Make all your Body-Strokes with the Full, and all Hair-Strokes with the Corner of your Pen.

Never turn your Pen, nor alter the Position of your Hand.

Let your Hair-Strokes be proportioned to your Body-Strokes, and answer one another.

Your Letters without Stems, must be even at the Top and Bottom.

Let your Stems above be equal in Length to *i* (i only excepted)

Your Stems below must be equal in Length to *j*.

Let your Capitals be equal in Height to *I*, and a little stronger.

Let your Words stand twice the Distance as your Letters, and your Lines twice the Length of *I*, that no Stems may interfere.

Hold your Pen between the two Fore-Fingers extended almost strait, and the Thumb bending outward with the Hollow downwards, and the Nib flat.

Let your Paper lie directly before you, and your Hand rest only on the Top of the little Finger.

Rest your Arm lightly between the Wrist and the Elbow.

Keep your Body upright, and your Elbow almost close to your Side.

Rest your Body on your left Arm, and keep your Paper down with your Left-Hand.

Never lean hard on your Pen.

In order to write expeditiously in Time, write slow at first.

Make the Nib of your Pen for the Round and Round-Text Hands, the Breadth of the full Stroke, and that Part lying next the Hand, somewhat shorter and narrower.

For the *Italian* Hand make the Nib somewhat finer, and the Slit longer.

Note, In Writing, where Figures are intermixed, they must always slope.

Your Figures likewise must be larger than your Writing.

When your Figures are ranged in Columns, make them upright.

How

How to make a PEN.

TAKE the first, second, or third Quills in the Wing of a Goose or Raven (those that are round, clip and clean, are the best;) when you have scrap'd off the thin Rind thereof, with the Back-edge of your Pen-knife, hold it in your Left-Hand with the Feather End from you, then enter the Back thereof sloping, and cut off as much in Length, as the Quill is in Breadth, and answer that with another Cut on the Inside, like an Opposite to the former; then turn the Quill, and enter the Edge of your Pen-knife even in the Back thereof, and exactly in the Midst of the Half Round, neither inclining the Blade one Way nor other, that the Slit may not be made awry. Then put in the Peg of your Knife-haft, if it has one for that Purpose, or the End of a whole Quill, and with a sudden Twich, force up the Slit, holding your left-hand Thumb hard upon the Back of the Quill, to put a Stop how far the Slit shall go. This being done, enter your Knife sloping in the other Side above the Slit, about twice the Breadth of the Quill, and cut away the Cradle-Piece; then turn the Back upwards, and cut down to the End of the Slit, the Cheek or Shoulder-pieces, and in so doing, turn the Knife on both Sides towards the Back. After this, place the Inside of the End or Nib of the Pen, upon the Nail of your Left-hand Thumb, holding the Quill fast between the Fore-finger and Middle-finger of that Hand. *Lastly*, To finish the Nib, enter the Edge of the Knife on the Back, and near the End thereof sloping, and immediately turning the Edge almost downright, cut it off.

There are four Considerations belonging to the Quill.

1. If the Quill be too hard, steep it a while in Water.
2. If it is too soft, harden it with Embers.
3. If it be too thick, pare a small Quantity from the Back of the Nib.
4. If it be too thin and weak, strengthen the Pen with a short Slit, a short Nib, and broad Shoulder.

Materials for Writing.

A Pen-knife Razor-metal, Quills good Store;
Gum Sandrick Powder, to pounce Paper o'er;

C 3.

Ink

Ink shining black, Paper more white than Snow,
 Round and square Rulers on yourself bestow ;
 Small Compasses to rule your double Lines,
 Wax, Sand, and Black-lead Pens for your Designs :
 These, with a willing Mind, and ready Hand,
 Will make this Art your Servant at Command.

A Receipt for the best BLACK INK.

TO six Quarts of Rain or River Water, (but Rain Water is the best) put one Pound and a Half of fresh blue Galls of *Aleppo*, (for those of *Smyrna* are not strong enough) bruised pretty small ; eight Ounces of Copperas, clean, rocky, and green ; also eight Ounces of clean, bright and clear Gum Arabick ; and two Ounces of Roch Allom : Let these stand together in a large stone Bottle, or clean stone Pot, or earthen Pot, with a narrow Mouth to keep it free from Dust ; shake, rowl, or stir it well, once every Day, and you will have an excellent Ink in about a Month's Time, and the older it grows, the better it will be for Use.

Ingredients for a Quart.

One Quart of Water, four Ounces of Galls, two Ounces of Copperas, and two Ounces of Gum, mix'd and stirred as above.

☞ If you soke the green Peelings of Walnuts, (at the Time of the Year when pretty ripe) and Oak Saw-dust, or small Chips of it, in Rain Water, and stir it pretty often for a Fortnight, and then strain it, and add the same Ingredients as above, the Ink will be stronger and better.

How to make RED INK.

TAKE three Pints of stale Beer, (rather than Vinegar) and four Ounces of ground Brazil Wood ; simmer them together for an Hour ; then put in four Ounces of Roch Allom ; and these three are to simmer together for Half an Hour ; and then strain it thro' a Flannel, or, &c. then bottle it up, well stopp'd, for Use.

Or you may dissolve half an Ounce of Gum-Seneca or Arabick, in half a Pint of Water ; then put a Pennyworth of Vermillion into a small Gallipot, and pour some of the Gum-Water to it, and stir it well, and mix it together

with

The YOUNG MAN's Companion. 31

with a Hair Pencil, to a proper Consistency; but it will not incorporate presently, but by the next Day it will: then having a clean Pen, dip it into the Ink, having first well stirred it with the Pencil; and then you may use it. It is a fine and curious Red, tho' not so free as the other. And after the same Manner, you may make any other coloured Ink, as Blue, Green, Yellow, Purple, &c. having divers Gallipots for that Use. In like Manner you may mix the Shell Gold for curious Occasions, pouring two or three Drops, or according to Discretion, into the Shell, and mix it well with a clean Hair Pencil, and with it put a little into a clean Pen, &c. The small Shells may be bought at some Fan-Sellers or Fan-Painters, two or three for Twopence; or the large ones, (which are the best) at the Colour-shops, at Six-pence a Piece.

To keep INK from Freezing or Moulding.

IN hard frosty Weather, Ink will be apt to freeze: which, if once it doth, it will be good for nothing; for it takes away all its Blackness and Beauty: To prevent which, (if you have not the Conveniency of keeping it warm, or from the Cold) put a few Drops of Brandy, or other Spirits into it, and it will not freeze. And to hinder its Moulding, put a little Salt therein.

Sing'e Line COPIES *in PROSE, in an Alphabetical Order.*

A.

A Custom Children to a true Notion of Things.
Approve not of that Man who commends all you say.
Ask not that Question you can resolve yourself.
A Sense of our Ignorance is the first Step to Knowledge.
Adversity is the Touch-stone of Friendship.
Affect rather to be useful than popular.
A flattering Companion is a dangerous Enemy.
A wise Man's Anger is of short Continuance.
Accept no Preferment on dishonourable Terms.
Affirm not all you hear, nor speak all you know.
A true Friend, like a Glow-Worm, shines in the Dark.
A wise Man governs with Ease, and is obey'd with Pleasure.
A prudent Woman sweetens her Husband's Misfortunes.

C 4

Abun-

Abundance and Plenty make Prodigals dainty.
 A covetous Man is always in Want.
 Add to your Faith, Virtue, and to Virtue, Knowledge.
 A comely Countenance is a silent Commendation.
 A Place of ill Example may endanger a good Man.
 A prudent Man values Content more than Riches.
 A virtuous Mind is rather to be chosen than Promotion.
 A fair Piece of Writing is a Sort of speaking Picture.
 All mundane Things run a continual Round.
 Authority is the main Point in Government.
 A great Lyar is seldom believed, tho' he speaks Truth.
 A wise Man will hear, and will increase Learning.
 Abstain from all Appearance of Evil.
 A merry Heart maketh a chearful Countenance.
 A false Balance is an Abomination to the Lord.
 Anger resteth in the Bosom of Fools.
 A soft Answer turneth away Wrath.
 A wise Son heareth his Father's Instructions.
 A Fool uttereth all his Mind.
 A dry Cough is the Trumpeter of Death.
 A long Tongue is a Sign of a short Head.
 A Man's best or worst Fortune is his Wife.
 Adversity makes a Man wise, rather than Riches.
 A blind Man's Wife needs no Painting.
 A Gift long waited for, is bought, not given.
 Advice comes too late, when a Thing is done.
 A Bribe will enter without knocking.

B.

BEfore you attempt, consider whether you can perform;
 Bad Books are the publick Fountains of Vice.
 Be slow in chusing a Friend, slower in changing him.
 Be not desirous to know other Mens Secrets.
 Be more afraid of secret Sins, than open Shame.
 Bounty is more commended than imitated.
 Brave Spirits promote the publick Good.
 Be patient in Adversity, and humble in Prosperity.
 Beauty without Virtue is like a painted Sepulchre.
 Be ashamed of your Pride, not proud of your Shame.
 Be less confident, and more diligent.
 By learning to obey, you shall know how to command.
 Beauty commands some, but Money all Men.
 Brave Men will do nothing unbecoming themselves.
 By a commendable Deportment we gain Reputation.

By

By Diligence and Industry we come to Preferment.
By constant Amendment we rise to Preferment.
Be not thou one of them who are Sureties for Debts.
Buy thou the Truth, and sell it not.
Better is the End of a Thing than the Beginning.
Better to go to Bed supperless, than to rise in Debt.
Buying and Selling is but Winning and Losing.
Better to be unmannerly, than too troublesome.

C.

CHILDREN require Instruction, as well as Provision.
Commit not that to another, that you can do yourself.
Custom in Infancy, becomes Nature in old Age.
Custom makes a Person move like an Engine.
Contemn not the Poor, nor flatter the Rich.
Charity should begin at home, and end abroad.
Commend, nor discommend any Man hastily.
Chide him not too much, who confesses his Fault.
Conceal your Weakness from them you instruct.
Compassionate Men never prove Extortioners.
Courtesy and Humility are Marks of Gentility.
Charity vaunteth not itself, is not puffed up.
Confession of a Fault makes half Amends for it.
Credit lost is like a Venice-Glass broke.
Contentment is preferable to Riches and Honour.
Consider the Shortness of Life, and Certainty of Death.
Competency with Content is a great Happiness.
Courtiers receive Presents in the Morning, and forget them
by Night.
Contentment makes a Man happy without a Fortune.
Censure no Man, nor detract from any Man.

D.

DERIDE not Infirmities, nor triumph over Injuries.
Delight in what you undertake to learn.
Drinking is the Drowning of Cares, not the Cure of them.
Death destroys not the Soul; but an ill Life does.
Delay is the Remora to all good Success.
Delight and Pleasure's but a golden Dream.
Despair of Cure is worse than the Disease.
Delights, like Physicians, leave us when dying.
Do unto others as you would have them do unto you.
Danger and Adversity discover true Friendship.
Death will comfortably end a well spent Life.
Devise not Evil against thy Neighbour.

C 5

Do

34 *The YOUNG MAN's Companion.*

Do not render Evil for Evil unto any Man.
 Death and Life are in the Power of the Tongue.
 Do nothing through Strife, or Vain-glory.
 Deeds are the Fruits ; Words are but Leaves.
 Distance is the best Remedy against an evil Man.
 Drunkenness reveals what Soberness conceals.
 Do no Hurt, where you can do no Good.
 Do not govern your Life by Fancy, but by Reason.
 Delay in many Cases is dangerous.

E.

Education is that which makes the Man.
 Examine and punish your own Infirmary.
 Envy is always waiting where Virtue flourishes.
 Envy, like a Vulture, preyeth upon itself.
 Eat rather for Appetite, than for Pleasure.
 Esteem him who teacheth you Wisdom.
 Every Delay of Repentance is a Cheat upon ourselves.
 Every prudent Man dealeth with Knowledge.
 Envy not a Sinner's Glory, for thou knowest not his End.
 Exalt Wisdom, and she shall promote thee.
 Even a Child is known by his Doings.
 Every Purpose is established by Counsel.
 Ease and Honour are seldom Bed-fellows.
 Every Man's a Pilot in a calm Sea.
 Examples prevail, when Arguments fail.
 Every Sluggard is the Cause of his own Misfortune.
 Evil Company makes the Good bad, and the Bad worse.
 Experience is the best Looking-glass of Wisdom.
 Every idle Thought, to Judgment must be brought.

F.

FAIR Words are often a Cloak for foul Actions.
 Follow the Dictates of Reason, and you are safe.
 Follies past are sooner remembered than redress'd.
 Forget not God in your Mirth, nor yourself in your Anger.
 Frequent Commission of Sin, hardens Men in it.
 First learn to obey, before you pretend to govern.
 Fortune commonly favours the Courageous.
 Feed your Body as your Slave, not as your Master.
 Faults committed in publick should be publicly reprov'd.
 Forsake the Foolish, and go in the Way of Understanding.
 Faithful are the Words of a Friend.
 Fools make a Mock at Sin.
 Fools tie Knots, wise Men undo them.

Fools

Fools make Feasts, and wise Men eat them.
Fools may put somewhat in a wise Body's Head.
Flee Pleasure, and it will follow you.
Fair Words commonly dress foul Deeds.
Fair Faces have sometimes foul Conditions.
Few do Good with what they have gotten ill.
Future Events must be left to Providence.
Fear is a good Watchman, but a bad Defender.
Fraud in Childhood will become Knavery in Manhood.
Fear without Hope turns to Despair.
Frugality and Industry are the Hands of Fortune.

G.

GOOD Men are Masters of their Pleasure, the bad are Slaves.

Grief may shorten Life as much as a Disease.
Goodness generally leads to universal Esteem.
Grieve not for those Things which are out of your Power.
Great Sins will require great Repentance.
Great Receipts render Men liable to great Accompts.
Great Men have many Opportunities to do much Good.
Give God the first and last of each Day's Thought.
Good Education is the Foundation of Man's Happiness.
Give as cheerfully as you do receive.
God often corrects us in this Life, to save us in the next.
God is our Refuge, a very present Help in Trouble.
God, our Parents, and our Masters, cannot be requited.
God help the Rich, the Poor can beg.
Great Pain and little Gain makes a Man soon weary.
Good Manners, Grace and Truth, are Ornaments in Youth.
Great Minds and small Means ruin many Men.
God's Works only are perfect in their Kind.
Greater Profit doth always come of Learning than of Play.
Good Men are safe, when wicked ones are at Odds.

H.

Happiness is desired by all, but obtained by few.
He is in some Degree wise that conceals his Ignorance.

Honours grace wise Men, and make Fools notorious.
He that will not work, should not eat.
He that begins well, has done half the Work.
Homer's wife Men look before and behind.
Hear both Parties before you give Judgment.
He that boasts in his Sins, glories in his Shame.

He

36 *The YOUNG MAN's Companion.*

He that trusts a known Knave, should expect to be cheated.
 He never wants Comfort, that has Content.
 He that delights to plant and set, puts After-ages in his Debt.
 Hear, ye Children, the Instruction of your Father.
 Hear Instruction; be wise, and refuse it not.
 He that pitieth another, remembereth himself.
 Hasty Resolutions are seldom fortunate.
 He that stumbles, and falls not, mends his Pace.
 Hypocrites first cheat the World, and at last themselves.
 He that sends a Fool of an Errand, ought to follow him.
 He is a wise Security, that secures himself.
 He that sins against Conscience, sins with a Witness.
 He that swims in Sin, must sink in Sorrow.

I.

Ideness has no Advocate, but many Friends.
 It requires as much Care to keep, as to get an Estate.
 Industry keeps the Mind clear, and the Body healthy.
 In others forgive much, nothing thyself.
 It is a double Curse to be poor and proud.
 In Prosperity prepare for Adversity.
 Intemperance kills more than the Sword.
 It is a Folly to fear, when we cannot avoid.
 Ingratitude thinks itself in no Man's Debt.
 If any Man lack Wisdom, let him ask it of God.
 If Riches increase, set not your Heart upon them.
 In the Multitude of Counsellors there is Safety.
 Industry is Fortune's Right-hand, and Frugality her Left.
 Instruction and a good Education is a durable Portion.
 It is good to have a Friend, but bad to need him.
 It is better to be unborn than untaught.
 Improvement of Parts, is by Improvement of Time.
 It is the Work of an Age, to repair the Miscarriages of an Hour.

K.

KNOW when to speak and when to hold your Tongue.
 Keep Company with those who may make you better.
 Keep thy Tongue a Prisoner, that your Body may go free.
 Knowledge puffs up some Men, and humbles others.
 Knowledge is the Treasure of the Mind.
 Keep back thy Servant from presumptuous Sins.
 Keep thy Tongue from Evil, and thy Lips from Guile.
 Keep good Company, and you shall be of that Number.
 Knavery may serve a Turn, but Honesty's best at long run.
 Keep

Keep a close Mouth, if you would have a wise Head.
Kings, as well as mean Men, must die.
Kings may command, and Subjects must obey.
Keep at a Distance from ill Company.
Keep good Decorum in your Words and Deeds.
Kings may win Crowns, but cannot conquer Death.

L.

Learning is the rich Man's Ornament, and the poor Man's Riches.

Laziness is commonly punished with Want.
Little Sins commonly lead Men to great Evils.
Learning is the Ornament of Youth, and Comfort of Age.
Life and Death are in the Power of the Tongue.
Lament not the Loss of that which you cannot retrieve.
Lying Lips are an Abomination unto the Lord.
Let another Man praise thee, and not thy own Mouth.
Love not Sleep, lest thou come to Poverty.
Let your Letter stay for the Post, not the Post for your Letter.

Life without a Friend is Death with a Witness.
Learn to live as you would wish to die.
Learn to unlearn what you have learnt amiss.
Liberty is grateful to all, but destructive to many.
Let no Jest intrude upon good Manners.
Lost Opportunities are very rarely, if ever recovered.
Let not the Work of To-day be put off till To-morrow.
Laugh not out of Measure, nor out of Season.

M.

MANY have suffered by Overtalking, but few by Silence.

Man has much to learn, but a short While to live.
Money is some Men's Servant, and other Men's Master.
Malice seldom wants a Mark to shoot at.
Make not a Jest at another Man's Infirmary.
Misfortune is a Touchstone of Friendship.
Make Provision for Want in Time of Plenty.
My Son, if Sinners entice thee, consent thou not.
Mercy and Truth shall follow them who devise Good.
Make no Friendship with an angry Man.
My Son, gather Instruction from thy Youth up.
Many Things fall between the Cup and the Lip.
Mischiefs come by the Pound, and go away by the Ounce.
Make not thy Friend cheap to thee, nor thyself to thy Friend.

Monu-

38 *The YOUNG MAN's Companion.*

Monuments of Learning are the most durable.
Many know Good, but do not the Good they know.
Many, when they have filled their Bellies, complain of weak Stomachs.

Measure not Goodness by good Words only.
Many live Beggars all their Life, that they may not die so.
Money makes some Men mad, many merry, but few sad.
Many are led by the Ears, more than by the Understanding.
Many are made Saints on Earth, that never reach Heaven.
Mend your Manners, and that will mend your Fortune.
Many want Help, that have not the Face to ask it.

N.

NONE pretend to hate an Injury more than he who offers it.

No Torments are so great, but Patience may vanquish.
Nothing is more contagious than an ill Example:
Not to grow better, is commonly to grow worse.
No Man hath seen God at any Time.
None are Fools always, but every one sometimes.
No Day passeth without some Grief.
Neither praise nor dispraise yourself; your Actions serve.
None should covet what cannot possibly be had.
Nothing is constant in this uncertain World. •
Necessity is commonly the Mother of Invention.
Nothing is so hard; but Diligence may overcome.
None can lay himself under an Obligation to do ill.
Nature seldom changes with the Climate.

O.

OF all Prodigality, that of Time is the worst.
Our Life here is but a Journey to the next World.
One Vice is more expensive than ten Virtues.
One Fault cannot justify the Commission of another.
One bad Companion may ruin many good Men.
Of all worldly Enjoyments, Money bears the Bell.
Of all Poverty, that of the Mind is most deplorable.
Of all Things, Death should never be forgot.
Out of the Abundance of the Heart the Mouth speaketh.
Only by Pride cometh Contention.
Open Rebuke is better than secret Hatred.
On a good Bargain think twice.
One Ounce of Discretion is worth a Pound of Wit.
Once well done is twice done.
Opportunity neglected brings severe Repentance.

On

On present Time depends our future State.
Omitting doing Good, is a committing Evil.
Orators are more solicitous to speak well, than to do so.
Our Minds must be cultivated as well as our Plants.
Other Peoples Deaths should be Memento's to our own.

P.

Prosperity gains Friends, and Adversity tries them.
Pry not into the secret Affairs of others.
Punishment deferr'd commonly falls the heavier.
Providence consults our Wants, not Wantonness.
Passion is a bad Counsellor, and as ill a Speaker.
Pride, like a wild Horse, overthrows his Rider.
Pursue useful and profitable Studies.
Poverty and Shame attend those that refuse Instruction.
Profess not the Knowledge that thou hast not.
Pain is forgotten when Gain follows.
Patience with Poverty is all a poor Man's Remedy.
Provide against the worst, and hope for the best.
Poor Men want many Things, but covetous Men all.
Put not off the main Business of Life, to the very Article
of Death.
Pain we can count, but Pleasure steals away.
Poor Freedom is better than rich Slavery.
Passion and Partiality govern in too many Cases.

Q.

Quantity is not so considerable as Quality.
Quench not your Desires when they tend to Good.
Quarrels are easily begun, but difficultly ended.
Quarrellsome Persons are mischievous Companions.
Quietness is secure, but Rashness is dangerous.
Quench not the Spirit; pray without ceasing.
Quick at Meat, quick at Work.
Quick Promisers are slow Performers.
Questions in Jest need no serious Answers.
Quietness and Content are Mates most excellent.
Quiet Men have quiet Minds, and enjoy Content.
Quarrellsome Persons sometimes meet with their Match.
Qualify exorbitant Passions with Quietness and Patience.

R.

Religion is best understood when most practised.
Revenge not Injuries, but forgive them.
Reality is now become a great Rarity.
Rather mistrust too soon, than be deceived too late.

Revenge

20 *The YOUNG MAN's Companion.*

Revenge is a Pleasure only to a mean Spirit.
Repentance is the Physick of the Soul:
Rich Men depend on the Poor, as well as the Poor on them:
Riches profit not in the Day of Wrath.
Remember not the Sins of my Youth.
Remember thy Creator in the Days of thy Youth:
Ride softly, that you may come home the sooner.
Rely not on another for what you can do yourself.
Remember your Duty to God, your Neighbour, and your-
self.

Repent To-day, To morrow may be too late.
Reputation is gain'd by many Actions; and lost by one.
Religion in Hypocrites, is, as it were, but Skin-deep.
Religion hath and doth give Countenance to much Wick-
edness.

Riches serve a wise Man, and rule a Fool.

S.

SELF-LOVE is the greatest Flatterer in the World.
Saying and doing should be but one Man's Office.
Silence is an Antidote against an envious Tongue.
Sin goes before, and Shame certainly follows after.
Success does not always attend Desert.
Shame and Disgrace shall be the Promotion of Fools.
Say not thou, I will recompence Evil.
Separate thyself from thine Enemies.
Speech is the Picture of the Mind.
Sell not the Bear's Skin before you have caught him.
Shew me a Lyar, and I will shew you a Thief.
Sin and Sorrow are inseparable Companions.
Some willinglier discharge a Reckoning, than pay a Debt.
Soft Words sometimes work upon the proudest Heart.
Small Means and large Minds, ruin many Men.
Short are all Extremes, whether of Good or Evil.

T.

THE Power of Example prevails more than Precept:
Truth is ashamed of nothing but to be hid.
Travel makes a wise Man better and a Fool worse.
Trust not too far, nor mistrust any too soon.
The Hope of Reward sweetens Labour.
To praise yourself is the Way to be dispraised.
To be cheated twice, is once your Fault.
The Death of our Passion is the Life of our Soul.
There are none so poor as those whom God hates.

Though

Though old and wise, yet still advise.
They need much, whom nothing will content.
The greatest Talkers are always the least Doers.
The Worth of a Thing is best known by the Want of it.
Those who wo'n't 'mend To-day, shall have more Work
To-morrow.

The doing nothing is very near doing Evil.
Truth is the strongest Band of human Society.
The City cares not what the Country thinks.
To do Good is the Way to find it.
Time, Tide, and Carriers, will for no Man stay.
The Unfortunate is insulted by every Rascal.

V.

VICE often deceives us under the Colour of Virtue.
Value not yourself by other Men's Opinion.
Variety is the Beauty of the World.
Virtue to noblest Acts the Mind inclines.
Virtue often suffers, when Vice goes unpunished.
Value not so much a fine Scabbard as a good Sword.
Valour can do little without Discretion.
Undertake deliberately, but execute vigorously.
Unsanctified Prosperity is the Bane of Virtue.
Unlawful Love ends generally in Bitterness.
Unto the Upright there arises Light in Darkness.
Unto thee will I cry, O Lord, be not silent to me.
Virtue is first to be sought for, and Money the next.
Virtue and Fortune work Wonders in the World.
Virtue is commended of all, but followed by few.
Virtue is seldom found a Match for Power.
Unwillingly go to Law, and willingly make an End.
Understanding a Thing, is half doing it.
Use soft Words, and hard Arguments.
Understand Things not by their Form, but Quality.

W.

WHatever is forbid in Act, is also in Thought.
Wicked Practices discover bad Principles.
Would you be wise, endeavour to be good.
Write Injuries in Dust, but Kindnesses in Marble.
Wisdom to the Mind, is like Health to the Body.
When Passion rides, then give Reason the Rein.
Wise Men keep their Expences short of their Income.
Where our Treasure is, there will our Hearts be also.
Weight and Measure take away Strife.

Where

42 *The YOUNG MAN's Companion.*

Where there is no Fault, there needs no Pardon.
 We are many Times deceiv'd with the bare Shew of Good.
 We dance well, whilst Fortune plays on the Musick.
 We keep a better Account of our Money than our Time.
 We must not blame Fortune for our own Faults.
 Would you be rich, be industrious ; if wise, be studious.

X.

Xenophon accounted the wise Man happy.
 Xerxes wept at the changeable State of Man.
 Xenophon commended heroick and virtuous Exercises.
 Xenophon was a learned General.
 Xenophon was a great Captain, as well as a Philosopher.
 Xerxes wept at the Thoughts that his vast Army would be
 dead in 100 Years.
 Xerxes whipt the Sea, because it would not obey his Com-
 mand.

Xenocratet, tho' a Philosopher, was very dull and heavy.

Y.

Youth is full of Disorder, and Age of Infirmary.
 Young Men are prone to hearken to bad Counsel.
 You may know Men by the Company they keep.
 You may be seen to give ; but give not to be seen.
 Your Vice, and not your Poverty, is your Shame.
 Young Men, see that you honour the Aged.
 You must crack the Shell, before you can have the Kernel.
 Young Men go to Death, but Death goes to old Men.
 Yield quietly to what must come unavoidably.
 Young Men in Strength should provide against Age and
 Weakness.

Z.

ZEAL grounded on Knowledge enlivens Devotion.
 Zeal for Religion cannot warrant Revenge.
 Zoilus and Momus will be always carping.
 Zeal, when misguided, proves mischievous.
 Zeal, in a good Cause, commands Applause.
 Zealously strive for an eternal Crown.
 Zeno was the first of the Stoick Philosophers.
 Zeal without Knowledge is but religious Wild-fire.
 Zeal, if not rightly directed, is very pernicious.

Short Lines for TEXT-HAND.

Abandon whatsoever's ill. Care destroys the Body.
 Be wise betimes. Do the Things that are just.
 Expect

Expect to receive as you give.	Recompence a good Turn.
Frequent good Company.	Repent of your Sins.
Give what you give cheerfully	Spare for to live.
Have good Men in Esteem.	Sin not wilfully.
Imitate that which is Good.	Time well improve.
Keep God's Commandments.	Turn from your Sins.
Learn to be wise.	Use moderate Pleasure.
Money answers all Things.	Use not bad Company.
Nothing get, nothing have.	Vain are most Pleasures.
Observe Modesty.	Vile are the Vulgar.
Pleasures are very short.	Wisdom is the principal thing
Pains are very long.	Wise Men are scarce.
Quit all Revenge.	<i>Xenophon and Xenocrates.</i>
Quiet your Passions.	<i>Zeno and Zenobia.</i>

P R O S E C O P I E S.

A.

AMONG Men of weak and base Minds, Merit begets Envy; but among those of a generous Spirit, it begets noble Emulation.

A Man of great Abilities may, by Negligence and Idleness, become so mean and despicable, as to be an Incumbrance to Society, and Burden to himself.

Aristippus being asked, wherein the Learned differed from the Unlearned, answered, send them naked to Strangers, and you shall soon see.

A Contest happening between *Folly* and *Prudence*, which should have the Precedence; and the Difference growing high, they referr'd the Decision of it to *Jupiter*; who gave Judgment, That *Folly* should go before, and *Prudence* follow after, to make the End happy.

B.

BY Industry we may reasonably hope to purchase and preserve Reputation, the Darling of human Affection.

Better it is to fall among Crows than Flatterers: For those only devour the Dead, these the Living.

Beware of the Man that has no Regard to his own Reputation, since it is not likely he should have any for yours. He that is told of a Fault, and says he does not care, merits Contempt from all Men.

Be not too forward to speak, nor affect long Speeches. It is hard to shoot often, and always hit the Mark. Confide

deg

der what you aim at ; and use few and common Words with strong Arguments to attain what you desire.

C.

Complaints are Folly, when we are the Authors of our own Misfortunes.

Contentment is the true Philosopher's Stone, the Poor are rich that have it, and the Rich are poor without it.

Conceitedness and Ignorance are a most unhappy Composition : For none are so invincible as your half-witted People, who know just enough to excite their Pride ; but not so much as to cure their Ignorance and Self-willedness.

Covet not many Books ; but let them be like the Number of your Friends, few, and such as you may both delightfully converse with, and improve by.

D.

Disdain not your Inferior, though poor ; since he may be your Superior in Wisdom, and all the noble Endowments of Mind, that render a Man amiable.

Did we rightly consider the Certainty of Death, and the Uncertainty of the Time, we should every Day so live, as if we died daily.

Do nothing but what is Praise-worthy, nor be puffed up with the Praise of Men : since Men generally commend those that are good to them, rather than those that are truly good in themselves.

Decency is to be observed in all our Actions ; but especially in Discourse, where we ought to consider how far our Discourse may be both instructive and entertaining : And as we found a Time to begin, so we should also learn when to leave off.

E.

Envious Men may be compared to Chafing-dishes, which cannot heat another without burning themselves.

Envious Men lose the Enjoyment of what they possess, by the Discontent they shew at what others enjoy.

Endeavour to suppress the first Thoughts of Revenge ; lest you create a civil War in your own Mind, while you are studying to make another uneasy.

Endeavour to make your Fortune as easy as you can ; and then be contented it is no worse ; and if it is not so good as you could wish it, be thankful that it is not so bad as it might have been ; and tho' you are not so happy as you desire, yet remember well, you are not so wretched as you deserve.

E.

F.

FEW take care to live well, but many to live long; tho' it is in a Man's Power to do the former, but in no Man's Power to the latter.

Few are so generous as to praise without some Exception; and their Refusal of Commendations is generally with a Design to be praised twice.

Future Events must be left to Providence: And it is a Happiness we are obliged to depend on it: For could Men foresee the Good or Evil that befall them, it would take away all prudent Care to obtain the one, and avoid the other.

Favour is to be esteemed, but not depended on. He that stands on another Man's Legs, knows not how soon they may fail him: Be sure therefore never to lean so hard upon any Man, that if he sinks, you may fall.

G.

GENEROUS and noble Spirits strive as much not to be overcome in Courtesy and Generosity, as the Valiant and Courageous not to be overcome in Battle.

God hath so wisely ordered Things in the Administration of the Affairs of the World, as to encourage the Use of Means, and yet as to keep Men in a continual Dependence on him for the Success of them.

Giving Praise with an Exception, is a malicious Way of Speaking; for to praise a Man, is to suppose him wise and honest; but to do it with an Exception, is to insinuate him to be a Fool, or a Knave.

Good Books are a Guide to Youth, and an Entertainment for Age; they support us under Solitude, and keep us from being a Burthen to ourselves: When we are weary of the Living, we may converse with these Dead, who have nothing of Peevishness, Pride or Design in their Conversation.

H.

HE that is not in his Life what he persuades others to, is like a Mountebank, that hates to take the Pills he commends to others.

He who does as well in private as in publick, gives himself a Testimony, that his Purposes are full of Honesty and Integrity.

He who is so impertinent, as to trouble Company with the Greatness of his Pedigree, or the many Virtues of his Family,

46 *The YOUNG MAN's Companion.*

Family, comes not to meet his Friends, but to receive Homage; and therefore ought to pay the Reckoning.

He that you would make your Friend, let him be virtuous: For an ill Man can neither love long, nor be long loved: And the Friendship of vicious Men may rather be called Conspiracy than Friendship.

I.

IN *Rome*, whosoever did these five Things, *viz.* Disobeyed his Father, Robbed the Temple, Hurt a Widow, Fled from Battle, or injured a Stranger, was banished the City.

It is better to have good natural Parts without Learning, than Learning without good natural Parts; but when these join together, they render a Man every way compleat.

It is as dangerous to be wilfully ignorant, as to know and not obey; for we are as much bound to know our Duty, as obliged to practise it.

It is a foolish Custom in the World, to follow rather Example than Precept; but it would be the safer Course to learn rather by Precept than Example: For there are many cannot follow their own Teaching; and it is easier to say, Do this, than to do it.

K.

KEEP a low Sail at the Entrance of your Estate. You may rise with Honour, but you cannot go back without Shame: For a good Beginning makes a good Ending.

Knaves have a secret Cunning to draw in the Credulous, by the Performance of small Things, that they may the more easily impose upon them in greater.

Knowledge softened with Complacency and good Breeding, will make a Man equally beloved and admired; but being joined with a severe and morose Temper, it makes a Man rather feared than respected.

Keep no Company with a Man who is given to Detraction; to hear him patiently, and shew a Countenance of Encouragement, is to partake of his Guilt, and prompt him to a Continuance in that Vice which all good Men shun him for.

L.

LET Virtue and Innocence accompany your Diversions, lest what you take for a Cordial prove a Poison.

Let your Words agree with your Thoughts, and be followed by your Actions; be careful in your Promises, and

just

Just in your Performances; for it is better to do, and not promise, than to promise, and not do.

Learn to know the darling Passion of your Soul; and believe that to be it, which has cut you out most Work for Repentance: And know, that it requires a noble-Resolution, and Fortitude of Mind, to subdue what Nature strongly prompts us to.

Let your Promises be sincere, and so prudently consider'd, as not to exceed the Reach of your Ability: He who promises more than he is able to perform, is false to himself; and he who does not perform what he has promised, is a Traitor to his Friend.

M.

MANY, by appearing too fearful, and jealous of being deceiv'd, have tempted others to deceive them.

Make not your Neighbour's Fault appear greater than it is, nor your own less; for to excuse your own Fault is to double it; and to aggravate another's by Detraction, is to make it your own.

Men are generally delighted with the bright Parts of Learning in other Men, and desire such Qualifications; yet they will not imitate the indefatigable Industry, by which they ascend to such Perfection.

Men who are descended from noble Blood, born to enjoy great Estates, graced with Titles of Honour, may, notwithstanding, be very unhappy, if they want Virtue, which is not hereditary.

N.

NOTHING is a greater Argument of Wisdom, than the prudent Management of our Time; and will, upon serious Reflection, produce the greatest Satisfaction.

Nothing shocks a great Mind more, than to see Merit placed in a false Light, and made the Subject of Contempt and Ridicule.

Never talk over much of what you know; lest you be suspected to talk of what you do not know: And though Silence is not always the Mark of a wise Man, yet Noise and Impertinence are sure and certain Marks to discover a Fool by.

Never commend any Man to his Face, but rather commend him to others, that they may have a good Opinion of him: Neither dispraise any Man behind his Back, but rather tell him privately of his Faults, that you may work a Reformation on him.

OUR

O. **O**UR Superfluities are the Poor's Right; and God having assign'd them as theirs, we rob them, when we do not let them have a due Proportion of them.

Our Interest and Inclinations have a strange Power of deceiving us: A strong Affection, or a Dislike is apt to represent Matters in a different Light, and to alter the moral Appearances of Things.

Opportunities neglected may not only debar us of many great and noble Advantages; but may create many melancholy Reflections, and anxious Thoughts; since they do not often happen, and when past, are irrecoverable.

One promising Chance of a treacherous Die flatters an improvident Gamester, with his own Hands to throw away his Wealth and Happiness to another's Disposal.

P.

PROSPERITY is so unhappy a Thing to some Men, that they never come to the Knowledge of themselves, till Adversity teaches what they truly are.

Provide yourself not only with defensive, but offensive Weapons: The first you may use on all Occasions; but the latter only in Cases of Necessity.

Penurious Men seldom want Excuses, when the Necessities of the Poor demand their Charity: As those Men shew a great Insensibility of another's Misery, so they make an ungrateful Return to their great Benefactor for the many good Things they are possess'd of.

Providence generally mingles such a Quantity of Bitter with the Sweetness of Prosperity, as not to suffer us to believe ourselves independent, lest we should forget ourselves, and our great Benefactor.

Q.

QUINTILIAN, an accurate Judge of Men, was pleased with Boys, who wept when their School-fellows outdid them; for the Sense of Disgrace would make them emulous, and Emulation would make them Scholars.

Quintilian was so fine an Orator and School-master, that he received his Pay out of the publick Treasury: Learning and Industry cannot be poor, being always necessary in a Commonwealth; and the Encouragement of them is a Prince's greatest Honour.

Quantity is generally valued by the Ignorant and the Covetous; the first is debarred from tasting an Excellence, and

and the other by endeavouring to gain much, discerns but little : It is only those Persons, who are of a generous Temper, and penetrating Judgment, that have Regard to the Quality of Things.

R.

REPUTATION is like a Fire ; when once you have kindled it, you may easily preserve it ; but if once you extinguish it, you will not easily kindle it again ; and if you should, it may burn a little, but it will never blaze.

Religion is the most chearful Thing in the World, and forbids us nothing, but what corrupts the Purity of our Minds, and breaks the Force and Vigour of them.

Rather run, than be drawn into Goodness ; but neither run, nor be drawn into Sin : Be not persuaded by any Means to be evil ; but be good without any Persuasion, so shalt thou be surely happy.

Recreation after Business is allowable ; but he that follows his Recreation instead of his Business, shall in a short Time have no Business to follow.

S.

SOLON made a Law, that those Parents should not be relieved in their old Age by their Children, who did not take care to give them a virtuous Education.

Some Men are born with such becoming Deportment and graceful Appearance, one would think that Nature had designed them for the elder Brothers of Mankind. A Spirit of Dominion exerts itself in them ; even in the most common Actions all obey them : Because in every Thing they seem to excel every Body else.

Sense of Shame is a very strong Restraint to keep Men from Sin. He who by a vicious Course of Life has worn out that Sense, has nothing left but Fear to deter him from the most barbarous Acts of Villany.

Shame, Disgrace, Diseases, Disappointment, and self condemning Reflections, are the common Punishments of Sloth, Idleness, and Wantonness. But Success and Riches generally attend honest Diligence.

T.

THE Mode and Custom of the World is very engaging and bewitching ; and therefore it is the first Thing that Fools learn, and the last that wise Men forsake.

The true Estimate of Living is not to be taken from

D

Age,

Age, but Action : A Man, as he manages himself, may die old at Thirty, and a Child at Fourscore.

The Mind of a Man has naturally a Bent to Extravagancy : And we find it is hard to stand against Example and Invitation : And if we push it on towards what it is already inclining, whither will it run ?

The Multitude is more taken with Appearance than Reality : For the Noise and Glitter of a Pretender shall excite their Attention, and flash upon their Weakness at an irresistible Rate ; while the modest, understanding Man passes unregarded, and often proves the Object of their Contempt, Scorn and Ridicule.

V.

VIRTUE consists in Knowledge and Action ; we must first learn to know, and then bring stubborn Nature to Practice ; the sooner we attain it, the longer we shall enjoy the Comforts of a rectified Mind.

Value no Man for his Opinion, but esteem him according as his Life corresponds with the Rules of Piety and Justice ; for a Man's Actions, not his Conceptions, are what render him truly valuable.

Use your Prosperity with so much Caution and Prudence as may not suffer you to forget yourself, or despise your Inferior ; and consider, at the same Time that you enjoy much, how little you deserve.

Virtue consists in bending the stubborn Will, in rectifying the crooked Inclinations, in over-ruling a rebellious Temper, in curbing eager and importunate Appetites, in taming wild and fierce Passions, and sustaining Injuries and Adversities with Humility and Patience.

W.

WE may as well expect that God should make us rich without Care and Industry, as make us good without our own Endeavours, or against our Wills.

Want of Thought makes Men impertinent ; and Want of Business makes them turbulent and pragmatical.

When God gave Being to Things, he could not but provide for their Operation ; otherwise he had taken care of the Means, and overlooked the End, which is a Contradiction no ways possible for him to be guilty of.

Was our Power equal to our Will, Desire would be a short liv'd Passion : It would generally begin and end in a single Thought ; for then we should put ourselves in the Possession

Possess
agreea

X
Becau
but ne

X
tion of
minate
convinc
the Bi

X
his Sh
Friend
and w
Well

X
the B
but al
Pleasu
Peopl

Y

on the
Hand
Yo
Mont
know

Y
comm
have
and f
Yo

strive
than
or ha

Z

Tong

Possession at the first Sight of whatsoever we imagine to be agreeable or desirable.

X.

XENOCRATES holding his Peace at some detracting Discourse, they ask'd him why he did not speak? Because, said he, I have sometimes repented of speaking, but never yet was sorry for holding my Peace.

Xenophon commends the *Persians* for the prudent Education of their Children, who would not admit them to effeminate their Minds with amorous Stories, being sufficiently convinced of the Danger of adding so great a Weight to the Bias of corrupt Nature.

Xantippe, the Wife of *Socrates*, pulled off his Cloak from his Shoulders in the open Forum (or publick Place,) some Friend present counselled him to beat her: Yes, saith he, and whilst we two fight, you may all stand by and cry, Well done, *Socrates*; To him, *Xantippe*.

Xerxes, the Son of *Darius*, after he had twice subdued the *Babylonians*, forbad them to bear Arms for the future; but allowed them to indulge themselves in all Manner of Pleasures; well knowing that nothing keeps a mutinous People so much in Subjection, as Effeminacy.

Y.

Y Is a Letter said to be invented by *Pythagoras*, and to denote Virtue and Vice by its two Branches; that on the Right-hand high and difficult, and that on the Left-Hand straight and easy.

You would weep if you knew you were to live but one Month; and yet you laugh and sport when you do not know that you shall live an Hour.

You should take a particular Care that you do not again commit the last Sin you have repented of; and when you have cast out one Devil, you should keep a stronger Guard, and stricter, lest seven return.

You never was so good as you should be, if you do not strive to be better than you are; nor will he ever be better than he is, that does not fear to be worse than he either is or has yet been.

Z.

ZENO hearing a young Man speak too freely, said, For this Reason, we have two Ears and but one Tongue, because we should hear much, and speak little.

Zeno used to say, a Man must live, not only to eat and drink, but to use this Life for the obtaining a better.

Zaleucus made a Law, that Adulterers should have their Eyes put out. Therefore when his Son was taken in Adultery, that he might both keep the Law, and be compassionate to his Son, he put out one of his own Eyes to redeem one of his Son's.

Zeno being warned by the Oracle to converse with the Dead, immediately fell to Reading. He was used to say, that a good Part of Knowledge consisted in the Ignorance of those Things which were neither material, nor useful for us to know.

COPIES of two, four, and six LINES, in Verse, alphabetically digested.

A.

ALL human Things are subject to decay ;
And when Death summons, Monarchs must obey.

Ape like, fond Parents act extremely ill,
While with Embraces, whom they love, they kill.

An honest Man may take a Knave's Advice ;
But Idiots only will be cheated twice.

All Men may with Impunity receive
What Freedom, Prudence, and right Reason give :
But the least Swerving from that Rule's too much ;
For what's forbidden, 'tis a Sin to touch.

A Man who changes Gold for burnish'd Brass,
Or small true Gems for worthless Toys of Glais ;
Is not, at length, more certain to be made
Ridiculous, and wretched by the Trade ;
Than he, who sells a solid Good, to buy
The gaudy Paint of Pride and Vanity.

B.

BRAVE Deeds, and spotless Virtue have
Rewards, which shall out-live the Grave.

Brave Minds oppressed, should in despite of Fate,
Look greatest like the Sun in lowest State.

By sad Experience this is known to some,
Who hate Instruction, to Destruction come.

Beauty, like Ice, our Footing does betray ;
Who can tread sure on the smooth slipp'ry Way ?

Pleas'd with the Passage we slide swiftly on,
And see the Danger which we cannot shun.

By being Fortune's Friend, you shall have Friends ;
But in Adversity their Friendship ends.
See how the Doves to new built Houses run,
And cautiously the ruin'd Tower shun.
The empty Barns no Vermin ever haunt :
And no Friend comes to him that is in Want.

C.

CONTENT is all we aim at with our Store,
And having that with little need no more.

Custom's a cruel Tyrant ; he that can
Well bear, or break its Force, is more than Man.

Censure none rashly : Nature's apt to halt ;
Look inward : He's unborn that has no Fault.

Cast off all needless, and distrustful Care ;
A little is enough, too much a Snare.

Our Journey from our Cradle to our Grave
Cannot be long, nor large Provision crave.

Custom too often Wisdom over-rules,
And only serves for Reason to the Fools.

Ill Customs by Degrees, to Habits rise ;

Ill Habits soon become exalted Vice.

Ill Habits gather by unseen Degrees,

As Brooks make Rivers, Rivers swell to Seas.

D.

DARING Ambition loves to slide, not stand ;
And Fortune's Ice prefers to Virtue's Land.

Death comes too soon in gay and prosperous Days :
But in our Misery too long delays.

Despise the World with all it's fading Joys ;
Compar'd with heavenly Things, they're trifling Toys,

Doubtless, for Happiness we need not roam :

'Tis easiest had with little, and at Home.

The Man whom God doth with Contentment bless,

Tho' he has little, does the World possess.

Delays are dang'rous, take a Friend's Advice,

Begin, be bold, and venture to be wise,

He who defers his Work from Day to Day,

Does on a River's Bank expecting stay,

Till the whole Stream, which stopt him, should be gone,

Which as it runs, for ever will run on.

E.

EXAMPLE is a living Law, whose Sway,
Men more than all the written Laws obey.

Each good Man is, in any Place, at home,
The Bad's an Exile whereso'er he come.

Ears we have two, one Tongue, from whence 'tis clear,
Before we speak once, we ought twice to hear.

External Pomp, and visible Success,
Sometimes contribute to our Happiness;
But that which makes it genuine, and refin'd,
Is a good Conscience, and a Soul resign'd.

Ev'n I condemn the hated Ills I act,
And thus a double Misery contract:
Yet of my Chains I'm not so weary grown,
But that I still am putting others on:
For Sin had always this attending Curse,
To back the first Transgression with a worse.

F.

FORTUNE a Goddess is to Fools alone:
The Wise are always Masters of their own.

Friendship will not the least Reserve endure;
But loves to share in Grievs it cannot cure.

Fear timely comes before a Fault's begun:
He fears too late, who fears not till 'tis done.

Force never yet a gen'rous Breast did gain:
We yield on Parley, but are storm'd in vain.
Constraint in all Things makes the Pleasure less;
Sweet is the Love which comes with Willingness.

Friends are like Leaves that on the Trees do grow,
In Summer's prosp'rous State much Love they show;
But art thou in Adversity? Then they,
Like Leaves, from Trees in Autumn, fall away.
Happy is he, who hath a Friend indeed;
But he more happy is, who none does need.

G.

GREAT Wits to Madness sure are near ally'd;
And thin Partitions do their Bounds divide.

Great Souls discern not where the Gap is wide;
But always look upon the farthest Side.

Great Wits, as well as Warriors, only gain
Laurels and Honours by their Toil and Pain.

Great is the Steadiness of Soul and Thought,
By Reason bred and by Religion taught;

Which,

Which, like a Rock, amidst the stormy Waves,
Unmov'd remains, and all Afflictions braves,

Great was the Genius, most sublime that Thought,
Which first the curious Art of Writing taught ;
This Image of the Voice did Man invent,
To make Thought lasting, Reason permanent ;
Whose softest Notes with Secrecy can roll,
To spread deep Mysteries from Pole to Pole.

H.

HE who pays more Respect to Wealth than Sense,
Would worship Idols to encrease his Pence.

He who bewalls, and not forsakes his Sin,
Confesses only what he'll do again.

He's rich, who never covets worldly Pelf ;

He's poor, who has enough, yet starves himself.

He that once Sins, like him who slides on Ice,
Goes swiftly down the slipp'ry Ways of Vice :

Tho' Conscience checks him, yet those Rubs gone o'er,
He slides on smoothly, and looks back no more.

Happy the Man, of Mortals happy'st he,
Whose quiet Mind from vain Desires are free ;
Whom neither Hopes deceive, nor Fears torment,
But lives at Peace, within himself content ;
In Thought, or Act, accountable to none,
But to his Conscience, and to God alone.

I.

IMMODEST Words admit of no Defence :
For Want of Decency, is Want of Sense.

It's to detract to give one less than Due ;
Who gives as much, must be as learned too.

In liquid Burnings, or in dry to dwell,
Is all the sad Variety of Hell.

In all Misfortunes, this Advantage lies
They make us humble and they make us wise ;
And he, that can acquire such Virtue, gains
An ample Recompence for all his Pains.

If ever I more Riches did desire
Than Cleanliness, and Quietness require ;
If e'er Ambition did my Fancy cheat
With any Wish so mean, as to be great ;
Continue, Heav'n, still from me to remove
The humble Blessings of that Life I love.

K.

KNOW when to speak, and silent when to sit,
Fools silent often pass for Men of Wit.

Knaves, tho' envelop'd in a deep Disguise,
Are yet too obvious to deceive the Wise.

Keep thy Friend's Counsel, when thou art in Trust;
And as in Words, so be in Actions just.

Keep down your Lust: Vice fades, if you take Pains;
Nourish'd by Sloth, more Ground it ever gains.

A Man employ'd no Leisure has to sin,
But being idle falls into't again.

Keep Death and Judgment always in your Eye;
None's fit to live, but who is fit to die.

Make use of present Time; because you must
Take up your Lodging shortly in the Dust.

'Tis dreadful to behold the setting Sun,
And Night approaching, e'er your Work is done.

L.

LLOUD Threatnings make Men stubborn; but kind
Words

Pierce gentle Breasts, sooner than pointed Swords.

Life for Delays and Doubts no Time does give;
None ever yet made haste enough to live.

Leave God to manage for thee, and to grant
What his unerring Wisdom sees thee want.

Love is the Monarch Passion of the Mind,
Knows no Superior, by no Law confin'd;
But triumphs still, impatient of Controul,
O'er all the proud Endowments of the Soul.

Laughter, if rightly us'd, may be confess'd,
In some Sort, to distinguish Man from Beast;
While by due Management it is allay'd,
And the strict Rules of Reason are obey'd:
But shews, if over loud, or over long,
Your Head's but weak, altho' your Lungs be strong.

M.

MEN are more oft on Earth, than Heav'n intent,
And their industrious Search is downwards bent.

Mens Follies make them frequently to err;
And then they Vice to Virtue do prefer.

Make much of precious Time, while in your Pow'r,
Be careful well to husband every Hour.

Marble,

Marble, or Brass, devouring Time may waste ;
But Wit, as long as circling Time, shall last :
That ever lives, nor can to Death submit ;
No Tomb he needs, whose Monument is Wit.

Mankind one Day serene and free appear,
The next they're cloudy, fullen and severe ;
New Passions, new Opinions still excite,
And what they like at Noon, despise at Night ;
They gain with Labour, what they quit with Ease ;
And Health, for want of Change, grows a Disease.

N.

NONE more pragmatical in State appear,
Than they whose Judgments in their Pockets are :
Next to the Pow'r of making Tempests cease,
Is, in a Storm, to learn to be at Peace.

No Minutes surely bring us more Content,
Than those in pleasing, useful Studies spent.

No Art without a Genius will prevail,
And Parts without the Help of Art will fail :
But where both these Ingredients jointly meet,
They make the happy Character compleat.

Nature is ever various in her Frame ;
Each has a different Will, and few the same.
The greedy Merchants, led by Lucre, run
To the parch'd *Indies*, and the rising Sun ;
While others, safe at home had rather keep,
Indulge their Sloth, and fatten with their Sleep.

O.

OUR Reformation never can prevail,
While Precepts govern, and Examples fail :
Our Shoes and Fortune sure are near ally'd :
We limp in straight, and stumble in the wide.

Observe in your Discourse the Bounds of Reason :
For Sense proves Nonsense, spoken out of Season.

Our Yesterday's To-morrow now is gone,
And still a new To-morrow does come on.
We by To-morrow draw up all our Store,
Till the exhausted Well can yield no more.

Oh ! to what heavenly Pitch that Soul aspires,
That craves no more than Nature's Need requires ;
But studies to be sober, wise, and good,
Content with mod'rate Fortune, and mean Food ;

58 *The YOUNG MAN's Companion.*

Who envies no Man Honour, or Estate ;
Nor yet despises those crush'd down by Fate.

P.

PRESENCE of Mind, and Courage in Distress,
Are more than Armies to procure Success,
Providence wisely hath it so ordain'd,
That all by all can never be obtain'd.

Premeditate your Speeches ; Words once flown,
Are in the Hearers Power, not your own.

Purchasing Riches with our Time and Care,
We lose our Freedom in a gilded Snare ;
And having all, all to ourselves refuse,
Oppress'd with Blessings, which we fear to use.

Perhaps, deceiv'd by Lust-supplying Wealth,
New enjoy'd Pleasures, and a present Health,
We fear to lose what a small Time must waste,
Till Life itself grows the Disease at last :
Begging for Life, we beg for more Delay,
And to be long a dying only pray.

Q.

QUIETNESS love, hate all Debate and Strife ;
Your M^{ind} inform, and well reform your Life.

Quietly learn all Crosses to endure ;
Repining doth more Misery procure.

Quarrelsome Natures often meet their Kind ;
And commonly what such Men seek, they find.

Query was made, What did *Jehovah* do
Before the World its first Foundation knew ?
The Answer was, He made a Hell for such,
As were too curious, and would know too much.

Quickly lay hold of Time, while in your Pow'r ;
Be careful well to husband ev'ry Hour :
For Time shall come, when you shall sore lament
Th' unhappy Minutes, which you have mispent.
Despair of nothing which you would attain,
Unweary'd Diligence your Point will gain.

R.

REMEMBER Death, think every Day your last ;
Lament all Vanities, and Follies past.

Rare is the Man, whose Life becomes a Scene,
To shew the guilty World, the golden Mean.

Rich Men are not too rich, whom Pride ne'er swells ;
Nor poor Men poor enough, in whom Pride dwells.

Return

Return the Kindness that you do receive,
As far as your Ability gives Leave.
Nothing can be more barbarously rude,
Than a vile Temper of Ingratitude.

Reason refin'd, and to Perfection brought
By wise Philosophy, and serious Thought,
Supports the Soul beneath the pond'rous Weight
Of angry Stars and impropitious Fate:
Then is the Time she should exert her Power,
And make us practice what she taught before.

S.

SORROW and Joy are ne'er disguis'd by Art;
Our Forehead shews the Secrets of our Heart;
Sicilian Tyrants never yet could find
A greater Torment, than an envious Mind.
Sin is a Slave to Custom, and will die,
Whenever Habits suffer a Decay.

See how the Lilies flourish white and fair,
See how the Ravens fed from Heaven are;
Then ne'er distrust thy God for Cloth and Bread,
Whilst Lilies flourish, and the Raven's fed.

Severe Decrees may keep our Tongues in Awe;
But to our Thoughts what Edicts can give Law?
Ev'n you yourself to your own Breast shall tell
Your Crimes, and your own Conscience prove your Hell:
For Conscience is the Test of ev'ry Mind;
Seek not yourself without yourself to find.

T.

THE stupid World most Honour pays to those,
Who on their Understanding most impose.
The World's a Wood in which most lose their Way,
Though by a diff'rent Path each goes astray.
Titles may set a Gloss upon our Name;
But Virtue only is the Life of Fame.

There is a Lust in Man no Charm can tame,
Of loudly publishing his Neighbour's Shame.
On Eagles Wings immortal Scandals flie,
While virtuous Actions are but born, and die.

The happiest Man that ever breath'd on Earth,
With all the Glories of Estate and Birth,
Had yet some anxious Care, to make him know
No Grandeur was above the Reach of Woe:

60 *The YOUNG MAN's Companion.*

To be from all Things, which disquiet, free,
Is not consistent with Humanity.

V.

VIEW all the habitable World, how few
Know their own Good ; or knowing it pursue !

Virtue must be the Fashion of the Town,
Before the Beaus and Ladies put it on.

Usurpers seldom to the Shades descend,
By a dry Death, or with a quiet End.

Virtue's the chiefest Beauty of the Mind,
The noblest Ornament of human Kind :
Virtue's our Safeguard, and our guiding Star,
That flirs up Reason, when our Senses err.

Venture not far into the dang'rous Deep,
But on the Land an equal Prospect keep :
The Ship is weak, and small, wherein we sail,
And at the Mercy of each conqu'ring Gale.
Learn then, my Soul, on Heav'n to fix thine Eye ;
Resolve to live, as you desire to die.

W.

WHY should we hope of being others Heirs ?
Does not our Sand run out as fast as theirs ?

Who with their present State are not content,
May find a worse for their just Punishment.

When once our vicious Appetites are tir'd,
We loath the Thoughts of what we once admir'd.

Want is a bitter, and a hateful Good,
Because its Virtues are not understood :
Yet many Things, impossible to Thought,
Have been by Need to full Perfection brought.

When my short Glas its latest Sand shall run,
And Death approach to fright the Lookers on ;
Costly may I sigh out my Soul in Air,
Stand thou, my pitying Guardian-Angel, there ;
Guide and conduct her thro' the Milky-way,
To the bright Region of eternal Day.

X.

XENOPHILUS did well in Health abide
One hundred seven Years, and then he dy'd.

Xerxes survey'd his mighty Host with Tears,
To think they'd die within an hundred Years ;
But by his own ill Manag'ent, we see,
They're all destroy'd, and dead in less than three.

Xantippe

The YOUNG MAN's Companion.

61

Xantippe brawls, while *Socrates* is still,
Yet ne'er was quiet, tho' she had her Will:
Her Fury made him patient, her perplex'd,
That, when she rag'd, she could not make him vex'd.

Xerxes, as Poets sing, a haughty Brave,
Whipt the rude Winds, and made the Sea his Slave:
But how return'd he, let us ask again?
In a poor Skiff he pass'd the bloody Main,
Choak'd with the slaughter'd Bodies of his Train.
For Fame he pray'd, but let the Event declare,
He had no mighty Penn'worth of his Prayer.

Y.

YOU sometimes both Time and Money spend
To lay an Obligation on your Friend.

Yesterday's past, To-morrow's none of thine,
To Day thy Life to virtuous Acts incline.

You Parents, who your Hopes in Children place,
Teach them betimes to run in Virtue's Race.

You'll mend your Life To-morrow, still you cry:
In what far Country does this Morrow lie?

It stays so long, 'tis fetch'd so far, I fear,
'Twill be both very old, and very dear.

Youth is unfit great Matters to contrive,
Their Reason's weak, their Judgment scarce alive:

But yet for Action they're more proper far:
They bold and active, strong and vigorous are.

Aged Experience better sure doth know;
But sprightly, able Youth can better do.

Z.

ZEAL is a Fire, and useful in its Kind:

But nothing is more dangerous, if blind:

Zalucus made his Laws so strict, that those,
Who were Adult'ers, both their Eyes shou'd lose.

Zeal for the publick Good with Men is rare;
But for Self-Interest, that's their chiefest Care.

Zaccheus short of Stature fain would see
His Saviour pass, and climbs into a Tree:

If we by Faith would see this glorious King,
Our Thoughts must mount on Contemplation's Wing!

Zaccheus fear'd no Danger; comes at Call;

He'll venture nothing, who can fear a Fall:

Needs must he down, by such a Spirit driv'n;

Nor could he fall, unless he fell to Heaven.

Down

Down came *Zaccheus*, ravish'd from the Tree :
Birds that are shot, ne'er dropp'd so quick as he.

To write on Paper Gold Letters, called Shell Gold.

LAY a little Leaf Gold upon a fine earthen Plate, and drop thereon a little clear Virgin's Honey; then work it up with your clean Knife's Haft, until it is stiff like unto a Paste, which put into an Oyster Shell, and do it close; when you are to write with it, put a little Gum-Water on the Side of the Gold, and mix a little thinly, fit for your Pen.

How to write secret Letters.

WRITE what you would have seen on one Side of the Paper with common Ink, and on the other Side with Milk, that which you would have secret; and when you would make the same legible, direct your Friend to hold that Side, which is written with Ink to the Fire, and the milky Letters will shew bluish on the other Side, and easy to be read.

Another Way.

RULE two Papers of one Bigness with Lines of an equal Distance, cut full of square Holes, which being laid upon another Sheet of Paper, you may write your Mind upon it thro' those Holes, and fill up the Spaces with other Words, which ought to hang together in good Sense, to prevent Suspicion. Each Person, to whom you write, must have one of the cut Papers to read your Letters, which shall be sent to him, and this Way of Writing cannot be read by any else.

Another Way.

YOU may first write a Letter, that may carry good Sense, to your Friend, but let the Lines be wide asunder: Then between these Lines write your secret Letter, with Gall-Water only, wherein the Galls have been infused but a little Time; for if after you have written with it, there be any sensible Colour left on the Paper, you must throw away the Water, and make new; this being dry, and of one Colour with the Paper, will give no Cause of Suspicion; and the rather, because the Letter purporteth a sufficient

Sense

Sense already. Now for the Discovery of it; you must dissolve some Copperas in fair Water, and with a fine Pencil, dipt in the Copperas-water, you must moisten the Interlining of your Letter, and thereby you shall make it legible. This is one of the most secret Ways that I know, says Sir Hugh Plat, in his *Jewel-House of Art and Nature*, &c.

How to write both Blue and Red Letters at once, with the same Ink and Pen, and upon the same Paper.

PUT the Quantity of a Hazel-nut of Litmose Blue to three Spoonfuls of Conduit-water, wherein some Gum-Arabick is dissolved; and when it hath settled the Space of an Hour, if you write therewith, you shall have perfect blue Letters: And if you dip a Pencil in the Juice of Lemons, and wet some Part of the Paper therewith, and afterwards let your Paper dry again, and then write upon the Place where the Juice of the Lemon was laid, with your blue Ink, the Letters will suddenly become red, and in all the rest of the Paper the Letters will be blue.

LETTERS on Business, Compliment, and several Occasions.

YOU have here a Collection of useful Letters on such Subjects as may naturally occur to a young Man, both before, and at his first setting out in the World; which, if read attentively, and copied carefully, will soon correct his Orthography, amend his Manner of Writing, and serve him to form a tolerable Style.

A Letter from a Scholar, inviting his Cousin to apply himself to Learning.

Dear Cousin,

THE Kindness I have for you cannot be easily expressed; and not only for your Person, but your future Happiness, and Welfare, which you can secure no better Way than by Learning; it will prove a fast and faithful Friend to you, when those Friends you too fondly rely on may fail or forsake you.

Wherefore, let me intreat you, not any longer to trifle away your Time, in pursuing Things lighter than Vanity; but

64 *The YOUNG MAN's Companion.*

but leaving those childish Extravagancies, betake yourself to your Book ; for certainly, did you know what sweet Content and Pleasure I find in my Studies, you would not be long absent from your's.

However, let me hear from you, and know how you stand affected as to this Matter ; till then, I rest with longing Expectation of your speedy Answer, who am

Your very loving Cousin,

And sincere Friend,

June 9th, 1755.

ADAM TRUE.

A Son's Return of Thanks for good Education.

Most dear Parents,

I AM constrained, as an humble Acknowledgment of my Gratitude, often to trouble you with my Epistles, as being the only Requital I am as yet capable of returning you, for the many Benefits and Advantages I have received at your Hands : But above all, for your prudent Fore sight in bringing me to the Knowledge of those Things which have seasoned my young Years with the Fear of God, a true Notion of Virtue, and Understanding in various Parts of Learning, which will, assuredly, render me acceptable, on sundry Occasions, with God's Blessing ; wherefore I must applaud that compelling Goodness in you, by which you even obliged me to persevere in learning what I had begun ; tho' then indeed, not discerning what I should afterwards reap thereby, I imputed to you as Harshness and Severity.

Let mistaken Youth consider, that in their tender Age they, not knowing what is good and commendable, ought to submit to the mature Judgments of their Parents ; who always, with Bowels of Love and Compassion, are studying their Welfare, tho' they perceive it not ; and in this Case, what shall I say more, than return all possible Thanks to you ; who next to the Love and Mercies of God, are the Authors both of my Being, and Well-being, who am,

With all due Respect,

May 8th, 1755.

Your most dutiful and obedient Son,

T. TURNER.

A N O.

A N O T H E R.

Honoured Sir,

I AM much obliged to you for all your Favours ; all I have to hope is, that the Progress I make in my Learning will be no disagreeable Return for the same. Gratitude, Duty, and a View of future Advantages, all conspire to make me thoroughly sensible how much I ought to labour for my own Improvement, and your Satisfaction, and to shew myself, upon all Occasions,

Eaton School,
May 8th, 1755.

Your most obedient Son,

JOHN WINDSOR.

A Letter from a Scholar to his Parents.

Dear Father and Mother,

AFTER my most humble Duty to you, and Love to my Brothers, Sisters, Uncles, Aunts, and Cousins, hoping you are all in good Health, as I, my Master, and the rest of the Family here are at present, Thanks be to God ; these are to let you know, that I received your Letter, dated the 5th of this Instant *June* ; for which, and also for the many Testimonies of your Love, I return you hearty Thanks ; and hope that the Progress, already made in my Learning, may, in the End, answer your Desires and Expectations ; and by the Satisfaction I hope you will receive, and the Advantages I shall receive, you will in some Measure be requited for all your Care and Tenderness towards me, who remain

June 20th, 1755.

Your dutiful Son,

RICHARD MAY.

Postscript. . My Uncle *Robert* would be glad of a Hare the first Opportunity, to oblige a very particular Friend.

Note, *This is called a Postscript, because written after the Body of the Letter was finished.*

A Letter of Excuse to a Father and Mother.

Honoured Father and Mother,

THE ill Report that you have heard of me, I suppose comes from some of my School-Fellows, who either envy my Happiness, or by aggravating my Faults, would be

66 *The YOUNG MAN's Companion.*

be thought to seem less criminal themselves; though I must confess, I have been too remiss in my Studies; but when I consider the Time and Credit I have lost thereby, the first being irrecoverable, my double Diligence for the Future, I hope, will regain the last, and so I may still have Leave to subscribe myself,

May 24th, 1755.

Your Dutiful Son,
JAMES LOWE.

A Letter from an elder Brother to a younger, exhorting him to good Behaviour, and seemly Carriage.

Dear Brother,

I Thought fit, seeing you are arrived at sufficient Years of Discretion, to put you in Mind, that your childish Affairs ought now to be laid aside, and instead of them more serious Thoughts and Matters take Place, that so you may add to the Reputation of our Family, and gain to yourself the good Esteem of being virtuous, which is of great Value, and ought to be prized at no common Rate, as being the chief Ornament of Youth and Age.

Nor would I have you take this Admonition amiss, or altogether out of Humour, and consequently term it out of Season, but as the true Sense and cordial Desire of him that loves you, and wishes your Advancement and Welfare equal with his own; coveting nothing more, than to see you thrive both in Wealth and Reputation: and so hoping this Advice will not be taken amiss, nor create any Misunderstanding between us, I take my Leave, and am

June 28th, 1755.

Your very loving Brother,
W. PHILIPS:

OBSERVE. Young Men, when they first appear in the World, ought to have a particular Care what Company they keep; for their future Happiness depends very much upon the Behaviour and Qualifications of those they frequently converse with.

Tho' such may have received good Principles in their Education, yet they want Practice to confirm their Habits of Virtue, and Courage to resist the Temptations and Allurements of Vice and Error.

They are apt to catch at any Thing that indulges and countenances their youthful Fancies. The Misfortune is, when

when they want Prudence most, they have then least of it. 'Tis happy when they listen to the Advice of their Parents, or some experienced Relation, who may be able to direct them in an Affair of such Consequence to their present and future Welfare.

A Letter to a Friend.

Dear Friend,

I WAS not a little glad, upon the Perusal of your Letter, of the 9th Instant, that you would be so kind at last, as to put it into my Power to do you any Manner of Service, whereby I might more immediately give you some Proof of my Friendship; nor indeed could you have required it at a more seasonable Time; wherefore, not to give you any Delay, I have sent by the Bearer, what you desired, and shall always be glad to oblige you in this Kind, as far as my Ability will extend. And so, with my hearty good Will towards you, and good Wishes for the Prosperity of your Affairs, I remain

Your unfeigned Friend,

June 27th, 1755.

JASPER SAMM!

Postscript. Because we may have an Occasion to write often to each other, I shall desire that you put in the Postscript of your Letters, somewhat of News, or other Secrets, in one of the two Ways of Writing which follow.

First, Put a Pennyworth of the Spirit of Vitriol in a Thumb-Bottle; to which add Half so much Spring Water, and write with it; and when you hold it to the Fire, the Letters will appear black, though no Writing before can be seen.

Or write in Trans-hand, which is but the changing five or six Letters of the Alphabet, as for *oudm*, read *earn*, and the contrary, and for *av*, *aa*. But I shall give one Example; as,

*Moal pqlchuso Flioms by Gifts; fel if yea tevas to giao
they airr revro reao.*

a e o u l m n r n o e a r n m l.

Read thus,

*Never purchase Friends by Gifts; for if you leave to give,
they will leave to love.*

CONGRAT

CONGRATULATORY LETTERS.

S I R,

THE News of your Promotion into that Charge, which you wish'd-for so long, hath added such Contentment and Satisfaction to my Thoughts, that I am able to express but one Part of the Joy which reigns in me. I trouble not myself to persuade you to it, by a long Discourse; your own Merit, and our reciprocal Friendship (supplying the Defect of my Eloquence) will give a far better Testimony than my Pen is able, which has in Charge at this present only to put you in Mind, that I am always,

S I R,

Your very humble Servant.

A N O T H E R.

S I R,

DO not admire that I am one of the last, who congratulate with you your good Fortune: The Joy which I conceived was so extreme, that it could afford me no sooner the Liberty to acquit myself. I know, the most of your Friends have prevented me, but being their Satisfaction is small, I do not wonder if their Diligence be the greater. As for my Part, my Idleness increaseth my Merit, since Stay and Protraction proceeded only from the Excess of the Gladness of,

S I R,

Your most humble Servant.

A N O T H E R.

S I R,

SINCE you doubt not the Friendship which I have promised you, you will easily believe, that I was extremely sensible of the good Fortune which hath lately happen'd to you: But I must tell you, that as your Merit made me foresee it in you long before it came, so I was far from being astonished at the first Recital. I wish you daily the like, or greater Advancements, being unable to acquit myself, otherwise than by Prayers, of the great Debt I owe you: Yet how unfortunate, or unprofitable soever I be, do not cease to continue me in the Number of,

S I R,

Your most obedient and faithful Servant.

As.

ANSWERS to the Letters of CONGRATULATION.

S I R,

I ALWAYS believ'd you was so generous, as to take Part in whatever should concern me, having begun so strict a Commerce of reciprocal Friendship. I persuade myself likewise, that you make no Doubt of the Passion which I have to do you Service : Whereof you may be as confident, as of the most assured Thing in the World, since I am, in Heart and Soul,

S I R,

Your most humble Servant.

A N O T H E R.

S I R,

SINCE you take Part in the good Fortune, which has befallen me, you must also participate in the Advantage of the new Credit, which it has brought me into. This I advertise you of, to the End that you let not any Occasion slip, wherein you may procure a Proof of my Friendship, nor forget this Advice, which I give you ; for believe, I am impatient to have an Opportunity of shewing you how much I am,

S I R,

Your Friend and Servant.

A N O T H E R.

S I R,

YOU seem to take Pleasure in nothing else but in giving me daily new Proofs of your Friendship, as if I were able to conceive any Doubt of it at all. I know you could not be so noble as you are, except you took Part in the Content, which I received, for the happy Success of my Affairs. And besides making Profession to love me, in that Height as I honour you, I know there was Necessity for your Satisfaction, and that you should be extremely sensible of the good Fortune of,

S I R,

Your most humble Servant.

A Letter of Thanks, &c.

S I R,

I RECEIVED the Favour of your's with a Kind of Present; and know not indeed at this Time any other Way to shew my Gratitude, than by my hearty Thanks for the same. Every Thing you do carries a Charm with it, your Manner of doing it is as agreeable as the Thing done. In short, Sir, my Heart is full, and would overflow in your Praise, did I not stop, and subscribe myself

May 13th, 1755.

Your most obliged,
and obedient, humble Servant,
JOHN WATTS.

A Letter requiring the Payment of Money, which serves as an Acquittance.

S I R,

I FIND, upon stating the Account between you and me, that several considerable Sums of Money are due to me from you; wherefore having Occasion for Twenty Pounds, I desire you to send it me by the Bearer hereof, (*or here name the Carrier*) and in so doing, you will very much oblige me.

As for the Payment thereof, this Letter, and the Bearer's Acquittance, shall be your sufficient Security and Discharge for so much Money. In Witness whereof, I have hereunto set my Hand this 6th Day of May, 1755.

JOHN CHAPMAN.

An Answer to the last Letter.

S I R,

I SENT by the Bearer [*or the Carrier*] Twenty Pounds, according to your Desire, and have taken his Receipt for it; but, because you know I send but for small Parcels of Goods at a Time, therefore I desire you always for the future, when I send you Money, that you mention in the Acquittances the Names of the Goods for which you receiv'd the Money, or at least, I would have you to mention what Money remains unpaid; for thro' Want of such certain Knowledge, some poor Country Tradesmen have found

great

great Loss, either by the Master, or their Apprentices receiving the Money sent, and not mentioning for what Goods. Pray take it not ill that I thus write, for I am satisfied of your honest Dealing; but know not the Servants you may intrust to receive the Money, I sent in small Parcels. I rest

Your Friend and Chapman,
W. LOVEJOY.

May 20th, 1755.

A Letter of Excuse from a Nephew to an Uncle.

S I R, [or *Loving Uncle,*]

I RECEIVED your Letter, and find by the Contents, that I have been represented to you as one of vile and wicked Principles. Indeed I dare not go about to excuse all those Follies, and youthful Frailties, of which, in some Measure, I have been guilty, tho' indeed, they have been aggravated by such as love me not, far beyond what they really were: But however, your Rebuke is not unseasonable, and the rather, because I construe it as your good Meaning, proceeding from the Desire you have of my Welfare, which obliges me, if I have hitherto offended you in any Thing, to beg your Pardon, and to give you my Promise, that for the future I will make it my Study to reform, and regain by my Well-doing, by God's Assistance, the Reputation I have lost by my doing otherwise; and so, most loving Uncle, with my hearty Respects to you, and my Aunt and Cousins, I remain

Your most obliged Nephew,
R. M.

A Letter from a Servant in his Master's Absence to one of his Country Customers.

Mr. Thomas Norton,

S I R,

London, December 7, 1754.

I RECEIVED your's, and for Answer say, I am very sorry to hear that the Goods have not answer'd your Expectation; however, have placed them to the Credit of your Account, and return'd others in their Stead by *Thomas Hobbs* the Carrier. I know my Master would willingly oblige you in any Thing in his Power, and as his faithful
Servant

72 *The YOUNG MAN's Companion.*

Servant I have herein done my utmost to give you Satisfaction, who am

To Mr. Robert Carter,
Cutler in Bristol.

Your most humble Servant,
JOHN WINDOR.

A Letter from a Niece to her Aunt.

Madam,

London, December 7th, 1754.

THE Trouble I have already given you, puts me to the Blush, when I think of intruding again on your Goodness; but Necessity, that frequently puts us upon what we should otherways have no Mind to, and forces us against our Inclinations, is now the Motive that induces me to be thus troublesome. Pray, Dear Madam, excuse me if I once more beg your Assistance in this Time of my unlucky Misfortune, and I shall ever have a grateful Remembrance of your Goodness to me; and, I hope, I shall be, one Time or other, in a Capacity of making some Returns of the many Obligations your Goodness hath conferred upon me.

Your most respectful Niece, and humble Servant,
ANNE ROBERTS.

A Brother to a Sister.

Dear Sister,

THE great Distance, and long Absence of me from you (tho' I have not wanted good Company) makes me very solicitous concerning your Welfare; natural Affection inclines me strongly to have you in Remembrance, tendering your Health and Welfare in every Respect as dear as my own; and there is nothing at my Command, but, if you request, it shall be freely your's. Notwithstanding the Distance I am now from you, I purpose (God willing) to make you a Visit very shortly, and had done it before now, but an urgent Occasion interposed, the Particulars of which being too long for a Letter, I shall acquaint you of when I see you. Pray give my due Respects to all Friends, particularly to Mr. T. And so in a hopeful Expectation of finding you all well at my Return, I conclude, and remain,

Dear Sister,
Your affectionate Brother, and humble Servant,
HENRY HOPE.

*A Letter from a Youth at School in London, to his Parents
in the Country.*

London, December 6th, 1754.

Honoured Father and Mother,

I RECEIVED your kind Letter of the 24th of November
past, and also the several Things therein mentioned,
by the *Chichester* Carrier, for which I return you my most
humble and hearty Thanks, they coming very seasonably
to the Relief of my Occasions.—I begin to make pretty
good Improvement in my Learning now, (tho' at the first
it seemed a little irksome and hard) and I hope to gain the
Point at last for which you sent me hither. Pray accept of
my most humble Duty to yourselves, and give my kind
Love to my Brothers and Sisters, and to my old Play-fel-
lows and Neighbours; this being all at present from,

Honoured Parents,

Your dutiful Son,

STEPHEN WRIGHT.

From an Apprentice to his Friends.

Honoured Father and Mother,

BY these I let you know, that by your good Care and
Conduct I am well settled, and pleased with my Sta-
tion, and could not but in Duty return you my hearty
Thanks in a grateful Acknowledgment of your Love and
tender Care of me: I will endeavour to go thro' my Busi-
ness cheerfully; and having begun well, I hope I shall per-
severe to do so to the End, that I may be a Comfort to you
hereafter, and in some Measure make a Return of your
Love and Kindness to me, who am,

Your most dutiful and obedient Son and Servant,

DANIEL DAVIS.

A Letter of Recommendation.

SIR,

THE Bearer hereof, *Francis Rogers*, I send to you as
one whose Honesty you may rely on, and my Expe-
rience of his Conduct and Fidelity gives me a certain Kind
of Confidence in recommending him to you; but you know
me,

me, Sir, and I believe you cannot in the least think that I would recommend any one to you, if I had the least Un-
brage of Suspicion or Doubt concerning their Probity.

I am, S I R,

Your real Friend, and humble Servant,

GEORGE JAMES

A Daughter to a Mother in relation to Marriage.

Honoured Mother,

WITH all Duty, Humility, and Respect, I address myself to you in these Lines, hoping they will find you in perfect Health both of Body and Mind, for which I am never wanting in my Prayers to beg of Heaven. As I would act nothing that is very material, without your Knowledge, Consent, and Approbation, I thought it my Duty to acquaint you of a Matter of the greatest Weight and Importance: Pardon me, if I blush to name it, viz. that of my Marriage: The Person (as I think) is well deserving of me, or one much better: It is Mr. A. B. of C. You know both him and his Character, viz. one sober, diligent, and good-humour'd; but however, I shall submit to your good Pleasure and Guidance in an Affair of such momentous Concern, and remain,

Honour'd Mother,

Your dutiful Daughter,

And very humble Servant,

MARY MEAD

To a Country Chapman.

Mr. Francis Pitt.

London, December 8th, 1754.

S I R,

YOU and I have formerly had Trading together, and it is not my Fault that we do not continue to do so: for assure yourself, I have a great Value and Respect for you, and on that Account none shall be more ready to oblige you in what I may; and pray let us once more reassume our Dealings together, and you shall find, that for any Goods you have Occasion for in my Way, none shall use you more kindly than,

S I R,

Your real Friend, and humble Servant,

THOMAS SHAD

The YOUNG MAN's Companion. 75

A Letter by Way of a Petition to a Friend.

Honoured Sir,

I AM uncertain whether my late Misfortunes have come to your Knowledge ; however, I most humbly presume on your good Nature, being assured by sundry Examples of your Compassion, that you will think of, and take Pity on the Distressed ; therefore, as an Object truly deserving Compassion, I most humbly implore and petition you to consider the many Losses and Disappointments that I have met with in my unlucky and wayward Fortune, which have reduced me to such necessitous Circumstances, that I cannot possibly proceed in my Affairs : You was pleased once to stile me your Friend, and so I was indeed ; and so I would certainly be now, and shew it by a signal Proof of Kindness, if our Circumstances were changed, by standing between you and Misfortune, and screening you from the malevolent and inauspicious Influences of crois grained Stars : I doubt not, Sir, but your Generosity and Goodness is as great ; and I hope, with all Humility, you will be pleased to interpose your good Offices, &c. between unlucky Fortune, and,

S I R,

Your very humble Servant,

LAURENCE LANE.

A Letter to a Friend, to desire him to endeavour to end a Difference.

Loving Cousin,

AFTER my Love to you, this is to let you know, that two of your Friends *A. B.* and *C. D.* are going to Law upon a trifling Occasion. I pray come over and see to reconcile them, or send your Advice how I may labour to do it, and I shall be very much obliged to you. I remain

Your affectionate Kinsman, and humble Servant,

E. F.

The Answer, with Advice.

Dear Cousin,

WITH my unfeigned Love to you, I received your Letter, and it grieves me to hear that our Friends should be for going to Law, and not compell'd to it ; for then much Money is spent upon Lawyers, to end their Differences by Jury-Men, when two Friends may do it better.

E 2

But

76 *The YOUNG MAN's Companion.*

But if one of the Parties is for going to Law, and the other not, then he that is against going to Law is the most Christian, and is not to be blam'd, tho' he use the Law of the Nation to defend himself; neither, indeed, can he avoid it, if his Adversary seeks Revenge, and so forces him to spend his Money in his Defence.

But you desiring my Advice about reconciling those two Friends, they having not yet feed Lawyers, persuade the Man that is for going to Law, that two Friends chosen by both Parties may end their Differences, or one Person only.

And when they have nominated two to end it, then persuade the two Parties to put into the Hands of those Arbitrators 40 s. or more a-piece, according to the Value of the Trespas. This agreed on, next,

Let the Parties sign and seal general Releases to each other; then the Arbitrators must dispose of the Money as they see good, to the Party that receiv'd the Wrong, &c.

Thus Differences among Friends may be compos'd at a much cheaper and better Rate than by Trial at the Assizes.

But yet 'tis best, when contending Parties agree by themselves, as Christ commands, (*Matt. xviii. 15.*) and forgive Trespas, (*Mat. vi. 12*)

Besides this, having general Releases, it cuts off all former Differences, and saves from divers Expences, and from Bonds of Arbitration and Awards, which, though they cost Money, often prove of no Effect.

Would to God the Advice above, of reconciling Men at Difference, would take Effect in general, then would Peace flourish, &c.

I remain your Friend,

W. M.

A Letter from an Apprentice to his Friends in the Country.

Honoured Father and Mother,

AFTER my humble Duty presented to you both, this is to acquaint you, that the Bearer *George Starvelly*, coming to see me last Night, told me he was going this Morning to our Town; upon which I thought to take this Opportunity, in a Line or two, to let you know, that, thro' the Goodness of God, I am very well in Health, and like both my Master and Mistress, and my Trade also very well; and do intend, with God's Assistance, to use my utmost Endeavour to do every Thing that belongs to it with that

Niceness,

Nicenese, that I may both please my Master, and answer your End in putting me out ; which, I presume, was, that I might be in a Capacity to get my own Living, as I hope I shall. Pray remember my kind Love to my Brother and Sisters, Aunts and Cousins ; which, being in Haste, is all at present, with my Prayers to Almighty God for you, from

Your ever dutiful and obedient Son,

R. T.

A Letter of CONSOLATION to a Lady on the Death of her Brother.

Madam,

ALTHO' I cannot but acknowledge, that to be insensible under so great a Loss, as you have lately sustain'd in your dear Brother, would be such a Piece of Stupidity, as could by no Means be justify'd, yet there is a vast deal of Difference between being insensible, and falling into an Excess of Grief : To be sensible of God's afflicting Hand in such a Dispensation, and to humble ourselves under it, is what we ought to do ; not to be inconsolable under such a Stroke, as if we fell out with Heaven, instead of submitting to the Will of God : That you might not therefore, Madam, add Sin to your Affliction, by an immoderate Mourning for the Loss of your Brother ; be pleased to consider, that you have no Reason to mourn as those that have no Hope ; his well-known Piety, and strict Virtue, both living and dying, remov'd all Fears on that Account. Consider also, that this excessive Grief is only the Product of Self-Love ; you mourn your Loss, not his ; for Death to him is Gain. And if the Bless'd above know the Transactions of their Friends below, your Grief for him would but impair his Happiness : Consider also, Madam, that all in him that was desirable and lovely, was but an Emanation from the Fountain of all Blessedness ; where all your Wants may always be supplied : For God is an inexhaustible and overflowing Fountain, and what wise Person would grieve so much, because the Stream is dried up, when there is a living Fountain open to repair to ? Consider also, that all your Tears are vain ; for could you weep the Ocean full, they would never bring him back ; Fate itself not being so fix'd as he. For not one Soul, since *Abel* first went hence, has return'd back to dwell on Earth again. Then dry your

78 *The YOUNG MAN's Companion.*

Tears up, Madam, and rejoice ; rejoice that he has paid the Debt, that, by the irrevocable Decree of Heaven, must first or last be paid by every Mortal. Rejoice that he has shot the dismal Gulf, and landed safe on the celestial Shore : And that whilst you're making Lamentations on Earth, he's employed in eternal Hallelujahs in Heaven : Where, when you late shall follow him, that you may join in the same blessed Concert, shall be the daily Prayers of,

Madam,

Your sincere Friend, and humble Servant,

W. W.

A Letter from a Gentleman to a Gentlewoman; to beg Pardon for an Offence.

Madam,

TIS in vain to contend with my Judge ; and therefore, tho' I know my Fault has been aggravated beyond what it would justly bear, yet I will rather submit myself to your Sentence, than go about to extenuate my Crime. I am guilty enough that I have offended you, tho' I never designed it ; and when you have done yourself Justice, by inflicting upon me what you think I merit for my Offence, then will I plead my Innocency, and let you know I always was so far from saying any Thing that might reflect upon your Fame, that in my Opinion, not Innocence itself is more unspotted, nor can unsully'd Snow appear more white : 'Tis true, I am guilty to give you Ground to think I have offended ; but my Offence is my Misfortune, rather than my Fault. But, Madam, what if I appeal from your severer Justice to your Mercy ? I know you are not inexorable, nor did you suck the Breasts of Wolves and Tygers : And since there's so much Sweetness in your Eyes, there needs must be some Pity in your Heart, at least so far as to forgive a poor repenting Criminal. And since you're such a bright Idea of the Author of all Goodness, you cannot but, like him, delight in shewing Mercy. I shall henceforth endeavour to be like *Cæsar's* Wife, not only free from Guilt, but from Suspicion : And further shall, to expiate my Offence, remain,

Your truly sorrowful,

And much afflicted humble Servant,

T. D.

The

The Answer to the foregoing Letter.

S I R,

I RECEIVED your Letter, and must let you know, that whatsoever reflects upon my Fame, (which is far dearer to me than Life) tho' at the most remote Distance, is what I cannot but think a Fault, and therefore know not how you can be innocent; and, indeed, to plead your Innocence, is to accuse me of Injustice, in charging you with a Crime: But, from what you write, I am inclined to believe, that in what you said you designed no Injury to me; and that it was a Crime of Inadvertence rather than of Malice. And for that Reason, upon your Profession of Repentance, I freely pardon you; but Charity itself does not enjoin me to hug the Man I pardon in my Bosom: You must not expect therefore to be admitted to the former Freedoms you enjoy'd, (since you have made so ill a Use of 'em) till you have given some more substantial Proofs of the Sincerity of your Repentance. And tho' I pardon this your first Offence, yet if you should relapse into your former Follies, you must expect a much severer Treatment: For then I shall no more esteem myself, as now I do,

Your reconciled Friend to serve you,

M. S.

A Letter from a Nephew to his Uncle.

Most kind and honoured Uncle,

THE many Obligations you have laid upon me, compel me to lay myself at your Feet, and make you this Tender of my humblest Service; which, if you have an Opportunity, shall amount to more than Words; for I am ambitious to imitate you, and to make good my Words by correspondent Actions. I am, in the mean Time, cordially praying for your Health and Happiness, expecting your Commands; which I will obey according to the utmost of my Power, and always remain

Your truly humble, and obliged Nephew,

J. D.

The Uncle's Answer to his Nephew.

Kind Nephew,

I RECEIVED your's of the 12th Instant, and take the Expressions of your Kindness, to come as gratefully as you intended

80 *The YOUNG MAN's Companion.*

intended them, assuring you, that tho' I take well the Acknowledgments you may have made me in your Letter, and the Offers you insinuate of a Requitall, yet I neither expect, nor desire it: But on the contrary, if at any Time you will be so kind to let me know wherein I can serve you, none shall be more ready, than

Your loving and affectionate Uncle,

B. L.

Precedents in Law and Business, that all young Men should know, and be acquainted with.

Superscriptions for Letters.

TO the King; or, To the King's most excellent Majesty.
To the Queen; or, To the Queen's most excellent Majesty.

To the Prince; or, To his Royal Highness. To the Princess; or, To her Royal Highness.

And in Case of the Lords Spiritual, *viz.* To his Grace the Lord Archbishop of *Canterbury*; To the Most Reverend Father in God, &c. The same to the Archbishop of *York*. If to the other Bishops, To the Right Reverend Father in God, *Thomas* Lord Bishop of, &c. And to the inferior Clergy; To the Reverend Doctor, &c. To the Reverend Mr. &c.

To write to Temporal Lords, *viz.*

To his Grace the Duke of, &c.

To the Right Honourable the Marquis of——

To the Right Honourable the Earl of——

To the Right Honourable the Lord Viscount——

To the Right Honourable the Lord——

All the Sons of the Nobility, tho' not the immediate Heirs, are to be dignified with the Title of Honourable, as their Due by Birth-Right. And to a Knight and Baronet by Virtue of his Patent, the Title of Honourable and Right Worshipful is given. As likewise the former to a Knight, and Worshipful to an Esquire.

Every Privy-Counsellor, tho' not a Nobleman, is stiled Right Honourable: All Ambassadors have the Stile of Excellency; as likewise hath the Lord Lieutenant of *Ireland*, and the Captain General of his Majesty's Forces when in Being; nor has the Lord Mayor of *London*, during his Mayoralty,

The YOUNG MAN's Companion. 81

Mayoralty, a less Title than Right Honourable; and the Sheriffs, during that Office, are stiled Right Worshipful; nor does any Thing less than the Title of Esquire extend to the Mayors of any Corporation during their Office.

Lastly, for the Beginning of Letters.

TO the King; Sir, or, May it please your Majesty.
To the Queen; Madam, or, May it please your Majesty.

To the Prince; Sir, or, May it please your Royal Highness.

To the Princess; Madam, or, May it please your Royal Highness.

To a Duke; My Lord, or, May it please your Grace.

To a Dutches; Madam, or, May it please your Grace.

To a Marquis; My Lord, or, May it please your Lordship.

To a Marchioness; Madam, or, May it please your Ladyship.

To an Earl, Viscount, or Baron; Right Honourable, or, May it please your Lordship. *In Viscount or Viscountess sound out the s in the first Syllable.*

To a Countess, Viscountess, or Barones; Madam; or, Right Honourable; or, May it please your Ladyship.

To a Knight; Sir, or, Right Worshipful; and to his Lady; Madam, or, May it please your Ladyship.

To a Mayor, Justice of Peace, Esquire, &c. Sir, or, May it please your Worship.

At subscribing your Name end with the same Title you began with. As, my Lord, your Lordship's, &c.

A Form of a Will, a Man having no Children.

IN the Name of God, Amen. I Thomas Man of——in the County of——, Yeoman, being of sound and disposing Mind and Memory, do make and ordain this my last Will and Testament; in Manner and Form following: That is to say, *Imprimis*, I Will, that all my Debts and Funeral Charges be paid and discharged by my Executrix herein after named. *Item*, I give and bequeath unto my Cousin——of——the Sum of ten Pounds of lawful Money of Great Britain. *Item*, I do give and demise unto my Brother's Son, all that Cottage, or Tenement, situate

82 *The YOUNG MAN'S Companion.*

situate in the Parish of —* in the County of — now in the Occupation of — with the Close adjoining to it, to the said — his Heirs and Assigns for ever. *Item*, I do give unto — my loving Wife, all the rest of my Goods and Chattels, and personal Estate whatsoever. Also I do give and demise unto — my said Wife, her Heirs and Assigns for ever, all my Lands and Tenements lying in the Parish of — in the County of — and now in the several Occupations of — and — or their under Tenants. And also the Messuage, or Tenement, situate in the Parish of — in the said Town of — and now in my own Occupation, together with the Orchard, and all the other Appurtenances thereunto belonging. *Lastly*, I do make and constitute — my said Wife, Executrix of this my Last Will and Testament, dated this — Day of — in the Year of our Lord, 1755.

T. M.

Note, There must be three Witnesses to the above Will, because there is a Devise of Lands.

Note, That a Man may give his Goods to any Person by Word of Mouth, before three Witnesses, before his Death; but 'tis much more secure to do it by Deed of Gift in Writing, in some such-like Form as this following.

A Deed of Gift of Goods.

TO all Christian People unto whom this present Writing shall come; I *A. B.* of, &c. send Greeting: Know ye, that I, the said *A. B.* for divers good Causes, and valuable Considerations, me hereunto moving, have given and granted, and by these Presents do give, grant, and confirm unto *C. D.* of, &c. all, and singular my Goods, Chattels, Household Stuff, and all other my Substance whatsoever, in whose Hands, Custody, Possession, or Keeping soever, the same are, or can, or may be found, to have and to hold, all and singular the said Goods, Chattels, and Household Stuff whatsoever of me the said *A. B.* unto the said *C. D.* his Executors, Administrators, and Assigns, from henceforth to his and their own proper Use and Uses thereof, and therewith to do, order and dispose, at his or their Wills and Pleasure, as of their own proper Goods and Chattels, freely, and peaceably, and quietly, without any Manner of Lett, Trouble,

le, or Denial of me the said *A. B.* or any other Person or Persons whatsoever : Of all which Premises I the said *A. B.* have put the said *C. D.* in full and peaceable Possession by Virtue hereof. In Witness whereof, I the said *A. B.* have hereunto set my Hand and Seal the 21st of May, Anno Domini, 1755.

Sealed and delivered (being first legally stamp'd) in the Presence of _____

OBSERVE. *Objection:* The Deed is not good, some say, if the Giver useth the Goods. *Ans.* But may not the Goods be lent him by the Receiver?

A Codicil, or Schedule to a Will, made after a Will is seal'd, &c.

BE it known unto all Men by these Presents, That I *A. B.* of, &c. Yeoman, have made and declared that my Last Will and Testament in Writing, bearing Date, &c. the said *A. B.* do by these Presents, contained in this Codicil, confirm and ratify my said Last Will, and do give and bequeath unto *J. E.* of, &c. And my Will and Meaning is, that this Codicil, or Schedule, be esteem'd and adjudg'd to be Part and Parcel of my said Will and Testament, and that all Things therein contained and mentioned, be faithfully performed in as full and ample Manner, in every Respect, as if the same were so declared and set down in my said Will. In Witness whereof, I the said *A. B.* have hereunto set my Hand and Seal the 21st Day of May, 1755.

OBSERVE. *Ecclesi.* xxxiii. 18, 19. Give not thy Son and Wife, thy Brother and Friend, Power over thee whilst thou livest, and give not away thy Substance to another, lest he repent thee, and thou be great for it again : As long as thou livest, and hast Breath, give not thyself over to any Person ; for better it is that thy Children should pray unto thee.

Answer Will.

IN the Name of God, Amen: I *W. M.* of, &c. being, thro' the abundant Mercy and Goodness of God, tho' weak in Body, yet of a sound and perfect Understanding and Memory, do constitute this my Last Will and Testament, and desire it may be received by all as such : *Impri-*

mis-

84 *The YOUNG MAN's Companion.*

mis, I most humbly bequeath my Soul to God my Maker, beseeching his most gracious Acceptance of it, through the all-sufficient Merits and Mediation of my most compassionate Redeemer Jesus Christ, who gave himself to be an Atonement for my Sins, and is able to save, to the uttermost, all that come unto God by him, seeing he ever liveth to make Intercession for them, and who, I trust, will not reject me, a returning penitent Sinner, when I come to him for Mercy; in this Hope and Confidence I render up my Soul with Comfort, humbly beseeching the most blessed and glorious Trinity, one God most holy, most merciful and gracious, to prepare me for the Time of my Dissolution, and then to take me to himself into that Peace and Rest, and incomparable Felicity, which he has prepar'd for all that love and fear his holy Name, Amen, blessed be God. *Imprimis*, I give my Body to the Earth, from whence it was taken, in full Assurance of its Resurrection from thence at the Last Day: As for my Burial, I desire it may be decent, without Pomp or State, at the Discretion of my dear Wife, and my Executors hereafter named, who, I doubt not, will manage it with all requisite Prudence. As to my worldly Estate, I will and positively order, That all my Debts be paid. *Item*, I give to my dear and loving Wife for Term of Life, this House wherein I now dwell, with all the Furniture, and the Lands and Tenements that lie about it; and after her Death, to my only Son S. and his Heirs and Assigns for ever; to whom I leave also, from the Time of my Death, my other two Estates situate in the Parish of N. he paying to each of his Sisters, C. and H. 1000 *l*. And if he die before them, and without Issue, then his Land (all but the Value of 1000 *l*. which, I freely empower him to dispose of as he shall think fit) shall descend, and belong equally to those my two Daughters. My poor Debtors, who owe me some small Matters, which because they are in low Condition, and not well able to pay them, I freely remit them all, forgiving such my Debts, as I desire God should forgive my Debts for Christ's Sake. I give 50 *l*. to be distributed according to the Discretion of my Executors, among such of my Neighbours of this Parish, as they shall apprehend most to want such Assistance, but who do not at present receive Alms, nor have any Allowance from the Parish. I give 20 *l*. towards that good Work for teaching poor Children to read, and to say their Catechism,

The YOUNG MAN's Companion. 83

Catechism, in Charity-Schools. The small Remainder of my Estate I give to my very good Friends, and dear and kind Relations *S. T.* and *H. M.* to be divided equally between them.: And do constitute them Executors of this my last Will and Testament, and Trustees for my Wife and Children. In Witness whereof, I have hereunto set my Hand and Seal, the third Day of *May*, in the Year of our Lord, 1755:

Witnesses, *R. S.*

G. A.

F. Q.

W. M. (L. S.) Here I take off my Seal, and do declare this to be my last Will and Testament.

Note, That if you have Occasion to write any Part of this Will, you must write the Words at Length, and plain, without interlining any Words; but if you do interline a Word or two, set it under that which the Witnesses are to set their Hands to; thus,

Another Will.

IN the Name of God, Amen. I *M. P.* of, &c. being in perfect Health, (praised be God) do make this my last Will and Testament as followeth. *Imprimis*, I give to my Daughter *N. P.* Ten Pounds of, &c. *Item*, I give to my Daughter *R. P.* One Hundred Pounds. of like lawful Money, and the Trunk in the Chamber where I lie, mark'd [*W. N.*] and all the Linen therein, with some other Goods, and the Rest and Residue of my Goods and Chattels, and personal Estate, after Payment of my Debts, Legacies, and Funeral Expences; and unto my Son *T. P.* whom I make sole Executor of this my last Will and Testament, I give, demise, and bequeath to him and his Heirs, all, and every my Messuages, Lands, Tenements, and Hereditaments whatsoever, and wheresoever, which I also charge with the Payment of my said Legacies. In Witness whereof, I have hereunto set my Hand and Seal, the 19th Day of *June*, and in the Year of our Lord, 1755.

Sealed, Published, and Declared by the above-named *M. P.* for and as his last Will and Testament, in the Presence of us,
N. O. R. W. G. H.

OBSERVATIONS. *Note*, That the Party who signs, and

and seals this Will, is to do it in the Presence of three Witnesses, who are to set their Hands to it, (not under three) and it is not much Matter whether the Witnesses hear the Will read or no, so as they hear the Party say, he acknowledgeth that Writing to be his Will, to which he sets his Hand and Seal; for if they did hear it read, it cannot be supposed that they can remember the Contents thereof. A Man above fourteen Years of Age may make a Will of his Goods; and a Woman above twelve: But neither can will their Lands until twenty one Years.

If a Man dies without a Will, and leaves both Free-Lands and Goods, his Wife will have the third Part of the Profits of the Land during her Life, and one third Part of the Goods for ever; and the next akin to the Husband the other two third Parts. But he that makes a Will, and leaves his Wife a certain Sum to be paid her yearly during her Life, by his Executor, should also give her some of his moveable Goods.

If a Man dies without a Will signed, and seal'd, leaving many Children, the eldest Son claims all the Land; but, if he leaves Daughters only, they will be Coheirs to all Free-Land.

Copyhold Land is not given by Will, but pass'd by Surrender in Court.

Wills by Word of Mouth, call'd Nuncupative Wills, are not good to pass Free-hold Land; but for Goods, or Leasehold Land, they often pass the Court for good, if under 30 *l.* Value, the Court writing one from the Mouths of three or four Witnesses, to which they give Oath, and put it in Writing within six Months after the Party's Decease.

To will Lands to *A. B.* for ever; or to *A. B.* and his Assigns, this is but for Life; but I give and demise unto *A. B.* his Heirs and Assigns for ever, so *A. B.* may sell it.

The Word Executor is the Name given to him that is to see the Will perform'd: But if to a Woman, she is call'd in the Will Executrix.

Set your House in Order while you are in Health.

For a (Will) Testament is of Force after Men are dead, Heb. ix. 17. *but not before.*

For if a Man hath seal'd his Will, and deliver'd it to a Friend to keep, he may make another, which makes the other Will void.

The Form of a Letter of Attorney, to execute a particular Business.

KNOW all Men by these Presents, That I *J. R.* of *B.* in the County of *B.* Yeoman, for divers good Causes and Considerations, me hereunto moving, have made, ordain'd, constituted, and appointed, and by these Presents, do make, ordain, constitute, and appoint my trully Friend *W. G.* of *L.* Gent. my true and lawful Attorney, for me, in my Name, and to my Use, to ask, demand, recover and receive of, and from *A. C.* of, &c. the Sum of, &c. Giving, and by these Presents, granting to my said Attorney, my sole and full Power and Authority, to take, pursue, and follow such legal Courses for the Recovery, Receiving, and Obtaining of the same, as I myself might, or could do, were I personally present; and upon the Receipt of the same, Acquittances, or other sufficient Discharges for me, and in my Name, to make, sign, seal and deliver: As also one or more Attorney or Attorneys under him to substitute and appoint, and again at his Pleasure to revoke; and further to do, perform and finish for me, and in my Name, all and singular Thing or Things, which shall or may be necessary, touching and concerning the Premises, as fully, thoroughly and entirely, as I the said *J. R.* in my own Person might, or could do, in or about the same: Ratifying, allowing, and confirming whatsoever my said Attorney shall lawfully do, or cause to be done, in and about the Execution of the Premises, by Virtue of these Presents. In Witness whereof, I have hereunto set my Hand and Seal, the 10th Day of *August*, in the 28th Year of the Reign of our Sovereign Lord *GEORGE* the 2d, by the Grace of God, King of *Great-Britain*, &c. and in the Year of our Lord God, 1755.

The Form of a Revocation of a Letter of Attorney.

KNOW all Men by these Presents, That whereas I *H. R.* of *H.* in the County of *G.* Yeoman, upon the Trust and Confidence which I had in *J. G.* of, &c. Gent. by Letter of Attorney under my Hand and Seal, bearing Date, &c. did make, ordain, constitute, and appoint the said *J. G.* my lawful Attorney, for me, and in my Name, and to my Use, to ask, demand, recover, and receive, of and from *W. W.* of, &c. Saker, the Sum of, &c.

as thereby more at large may appear : Now know ye, that I the said *R. H.* for divers good Causes and Considerations me hereunto moving, have and by these Presents do revoke, disannul and make void the said Letter of Attorney, and all Power and Authority, therein to him the said *J. G.* given. In Witness, &c.

The Form of an Indenture for an Apprentice.

THIS Indenture witnesseth, That *T. G.* Son of *P. G.* &c. doth put himself Apprentice to *G. H.* Tallow-Chandler, to learn his Art or Mystery, and with him, after the Manner of an Apprentice, to serve from the Day of the Date hereof, for and during the Term of Seven Years next ensuing ; during all which Term, the said Apprentice his said Master faithfully shall serve, his Secrets keep, and all his lawful Commands every where gladly do : He shall do no Damage to his said Master, nor see it to be done by others, without letting or giving Notice thereof to his said Master : He shall not wattle his said Master's Goods, nor lend them unlawfully to any. He shall not commit Fornication, nor contract Matrimony during the said Term ; he shall not play at Cards, Dice, or any other unlawful Game, whereby his said Master may be damaged, with his own Goods ; nor the Goods of others : He shall not absent himself Day nor Night from his said Master's Service unlawfully ; nor haunt Ale Houses, Taverns, or Play-Houses ; but in all Things behave himself as a faithful Apprentice, in the Trade or Mystery he now followeth ; and the said Master shall procure and provide for him sufficient Meat, Drink, Apparel, Lodging, Washing, and all other Necessaries, during the said Term. And for the true Performance of all and every the said Covenants and Agreements, either of the said Parties bindeth himself unto the other, firmly by these Presents. In Witness whereof, they have interchangeably set their Hands and Seals hereunto, this twentieth Day of *June*, in the twenty eighth Year of the Reign of our Sovereign Lord *GEORGE* the 2d, King of Great Britain, France and Ireland, &c. and in the Year of our Lord, 1755.

A Letter of Attorney from a Seaman.

KNOW all Men by these Presents, That I *H. H.* Mariner, now belonging to his Majesty's Ship the, &c.
for

for divers good Causes and Considerations me hereunto moving, have, and by these Presents do make, ordain, constitute and appoint my trusty Friend, *P. Q.* Citizen and Baker of *London*, my true and lawful Attorney for me, and in my Name, and for my Use, to ask, demand, and receive of and from the Right Honourable the Treasurer, or Pay-master of his Majesty's Navy, and Commissioners for Prize Money, and whom else it may concern; as well all such Wages, and Pay, Bounty-Money, Prize-Money, and all other Sum and Sums of Money whatsoever, as now are, and which hereafter shall or may be due or payable unto me; also all such Pensions, Salaries, Smart-Money, and all other Monies and Things whatsoever, which now, or at any Time hereafter is, or shall be due to me for my Service, or otherwise in any of his Majesty's Ship or Ships, Frigates or Vessels: Giving and hereby granting unto my said Attorney full and whole Power, to take, pursue, and follow such legal Ways and Courses for the Recovery, Obtaining, and Discharging the said Sum and Sums of Money, or any of them, as I myself might, or could do, were I personally present. And I do hereby ratify, allow, and confirm all and whatsoever my said Attorney shall lawfully do, or cause to be done, in and about the Execution of the Premises, by Virtue of these Presents. In Witness, &c.

A B O N D.

KNOW all Men by these Presents, That I [*Benjamin Burr*, in the County of *Middlesex*, Merchant,] am held, and firmly bound unto [*William Ward*, of *Sutton Colfield*, in the County of *Warwick*, Esq;] in the Sum of [*one hundred*] Pounds of good and lawful Money of *Great Britain*, to be paid to the said [*William Ward*] his Heirs, Executors, Administrators, or Assigns: To which Payment, well and truly to be made, I bind myself, my Heirs, Executors, Administrators, and Assigns, firmly by these Presents. Sealed with my Seal. Dated the [*first Day of May*] in the [*28th*] Year of the Reign of our Sovereign Lord [*GEORGE the Second*] by the Grace of God King of *Great Britain, France, and Ireland*, Defender of the Faith, and in the Year of our Lord God [*one Thousand seven Hundred, and Fifty-five*.]

The

The CONDITION.

THE Condition of this Obligation is such, that if the above-bouden [*Benjamin Burr*] his Heirs, Executors, or Administrators, do well and truly pay, or cause to be paid, unto the abovementioned [*William Ward*] his Executors, Administrators, or Assigns, the full Sum of [*fifty Pounds*] with lawful Interest for the same, of good and lawful Money of *Great Britain*, on the [*first Day of November*] next ensuing the Date hereof; Then this Obligation to be void, or else to remain in full Force.

Seal'd and deliver'd (being

first legally stamp'd) in

the Presence of,

A. B.

C. D.

Benjamin Burr. (L. S.)

☞ When a Bond is given in Consideration of the Value received, the Bond is always to be made for double the Value in the Condition.

What is to be varied, and made agreeable to the Circumstances before you, is in those Words inserted between [] and in a different Character.

A Condition to stand to the Award of Arbitrators.

THE Condition of this Obligation is such, That if the above bouden [*Benjamin Burr of London, Merchant*] his Heirs, Executors, and Administrators, and every of them, do and shall in all Things, well and truly stand to, obey, abide by, perform, fulfil, and keep the Award, Order, Arbitrament, final End and Determination of [*Anthony Ayres and Michael Mills, of London, Merchants,*] Arbitrators indifferently named, elected, and chosen, as well on the Part and Behalf of the above-bouden [*Benjamin Burr*] as of the abovenamed [*William Ward*] to arbitrate, award, order, judge, and determine of and concerning all Manner of Action and Actions, Cause and Causes of Actions, Suits, Bills, Bonds, Specialties, Judgments, Executions, Extents, Accounts, Debts, Dues, Sum and Sums of Money, Controversies, Trespasses, Damages, and Demands whatsoever, at any Time or Times heretofore had, made, moved, brought, commenced, sued, prosecuted, done, suffered, committed, or depending by or between the said Parties, so as the Award be made and given up in Writing,

Writing, under their Hands and Seals, ready to be deliver'd to the said Parties on or before the [*next* *ensuing the Date above-mentioned:*] But if the said Arbitrators do not make such their Award, of and concerning the Premises, by the Time aforesaid; That then, if the said [*Benjamin Burr*] his Heirs, Executors, and Administrators, for his and their Parts and Behalf, do in all Things well and truly stand to, obey, abide, perform, fulfil, and keep the Award, Order, Arbitrament, Umpirage, final End and Determination [of *Francis Forth* of *London*, Esq;] Umpire indifferently chosen between the two Parties, to end the said Matter and Differences, so as the said Umpire do make his Award or Umpirage, of and concerning the Premises, and deliver the same in Writing under his Hand and Seal, to the said Parties, on or before the [*Day of*] next ensuing the Date aforesaid; Then this Obligation to be void, or else to remain in full Force.

Seal'd and deliver'd, (being legally stamp'd) in Presence of, &c.

Benjamin Burr. (L. S.)

Note, Both the Parties are in this Case to be mutually bound, *mutatis, mutandis*; and if there be no Umpire admitted of, the latter Part of the Condition, beginning [*But if the said Arbitrators*] is to be omitted.

The Form of an Umpirage of Award.

TO all People to whom this present Writing shall come: I [*Francis Forth* of *London*, Esq;] Umpire indifferently chosen between *Benjamin Burr* and *William Ward*, of *London*, Merchants,] send Greeting: Now know ye, that I the said *Francis Forth*, having deliberately heard, considered, and understood the Grievs, Allegations, and Proofs of both the said Parties; and being willing, as much as in me lieth, to set the said Parties at Unity and good Accord, do by these Presents arbitrate, award, order, deem, decree and judge, that the said [*Benjamin Burr*] his Executors, Administrators, or Assigns, do, and shall well and truly pay, or cause to be paid, unto the said [*William Ward*] his Executors, Administrators, or Assigns, the full Sum of [] of lawful Money of *Great Britain*, on the [*Day of*] next ensuing the Date of these Presents; and that upon Payment thereof, the said [*Benjamin Burr*,

92 *The YOUNG MAN's Companion.*

Burr, and William Ward] shall, at their own proper Costs and Charges, seal, subscribe, and as their several Acts and Deeds, deliver each to the other, a general Release in Writing, of all Matters, Actions, Suits, Causes of Actions, Bonds, Bills, Covenants, Controversies, and Demands whatsoever, from the Beginning of the World to the [*first Day of May last past*] and in the [28th] Year of our Sovereign Lord [*GEORGE*] King of *Great Britain, &c.* In Witness whereof I have hereunto set my Hand and Seal, the [14th Day of June, 1755.]

Seal'd and deliver'd, (being duly stamp'd,) in Presence of, &c.

Francis Fortb. (L. S.)

A Letter of License to a Debtor.

TO all People, to whom this present Writing shall come: We whose Names are here under subscribed, and Seals affix'd, Creditors of [*A. B. of London, Merchant,*] send Greeting. Whereas the said [*A. B.*] on the Day of the Date of these Presents, is indebted unto us severally, in divers considerable Sums of Money, which at present he is not able to satisfy unto us, with Respite, and Time to be given unto him for the Payment thereof: *Know ye therefore,* That we the said Creditors, for divers good Causes and Considerations, us thereunto moving, have given and granted, and by these Presents, do give and grant unto the said [*A. B.*] our sure and safe Conduct, and free License, that he the said [*A. B.*] shall, and may safely come and go, and resort unto us, and every one of us, his said Creditors, to compound and take Order with us, and every one of us for all and every of our said Debts, and to go about any other Business to any other Person or Persons whatsoever, without any Trouble, Suit, Arrest, Attachment, or other Molestation to be offer'd, or done unto him, the said [*A. B.*] his Wares, Goods, Monies, or other Merchandizes whatsoever, by us, or any of us, or by the Heirs, Executors, Administrators, Partners, or Assigns of us, or any of us, or by our, or any of our Means and Procurement, to be sought or procur'd to be done, from the Day of the Date hereof, unto the full End and Term of [*one whole Year*] next ensuing. And we the said Creditors, whose Names are here underwritten, do hereby covenant and

and grant, and every one of us for his own Part, his Executors and Administrators, covenanteth and granteth, to and with the said [A. B.] that if any Trouble, Wrong, Damage, or Injury shall be done unto him the said [A. B.] either in his Body, Goods, or Chattels, or any of them, within the said Term of [one Year] next coming after the Date hereof, by us, or any of us, his said Creditors, or by any other Person or Persons, by or thro' the Procurement, Consent, or Knowledge of us, or any of us, contrary to the true Intent and Meaning of this our Present Writing of safe Conduct, that then the said [A. B.] by Virtue of these Presents, shall be discharg'd and acquitted for ever, towards and against him and them, of-us, his and his Heirs, Executors, Administrators, Partners, or Assigns, and every one of them, by whom, and by whose Means he shall be arrested, troubled and attached, or damnify'd, of all Manner of Actions, Suits, Quarrels, Debts, and Demands, either in Law or Equity, from the Beginning of the World, to the Day of the Date hereof: In Witness whereof, we have hereunto set our Hands and Seals the [Fourth Day of May,] Anno Domini, 1755.

Seal'd and deliver'd, (being first duly stamp'd,)
in Presence of, &c.

R. D. (L. S.)

P. Q. (L. S.)

E. L. (L. S.)

A Bill of Sale.

KNOW all Persons, whom it may concern, That I [John Nokes of Norwich, in the County of Norfolk, Goldsmith] for and in Consideration of the Sum of [fifty Pounds] of lawful Money of Great Britain, to me in Hand paid, by [Daniel Dunn of London, Esq;] the Receipt whereof I do hereby acknowledge, have bargain'd, sold and delivered, and by these Presents, according to the due Form of Law, do bargain, sell and deliver unto the said [Daniel Dunn, four Caracts of Oriental Pearl; nine Grains of brait Diamonds; one Silver Tea-Pot, Weight twenty Ounces; one Silver Salver, Weight ten Ounces; two Sets of Silver Casters, Weight thirty Ounces; and ten Cornelian Rings, seal'd up by Consent with my Seal.] To have and to hold the said bargain'd Premises, unto the said [Daniel Dunn] his Executors, Administrators and Assigns for ever. And I the said [John Nokes] for myself, my Executors and Administrators

trators, the said bargained Premises unto the said [Daniel Dunn] his Executors, Administrators and Assigns, against all Persons, shall and will warrant, and for ever defend, by these Presents: * Provided nevertheless, that if I the said [John Nokes] my Executors, Administrators or Assigns, or any of us, do and shall well and truly pay, or cause to be paid unto the said [Daniel Dunn] his Executors, Administrators or Assigns, the Sum of [*fifty one Pounds ten Shillings, as Principal and Interest, lawful Money of Great Britain, on the first of November, next ensuing the Date hereof*] for Redemption of the bargained Premises; then this present Bill of Sale shall be void and of none Effect: But if Default be made in the Payment of the said [*fifty one Pounds ten Shillings,*] in Part, or in the Whole, contrary to the Manner and Form aforesaid, that then it shall remain and be in full Force and Virtue: In Witness whereof, I have hereunto set my Hand and Seal, the [*first Day of May,*] in the Year of our Lord, (1755.)

Seal'd and deliver'd, &c.

John Nokes, [L. S.]

A General Release.

KNOW all Men by these Presents, That I [Henry Hart, of London, Founder,] have remised, released, and for ever quitted Claim, and by these Presents, do for me, my Heirs, Executors and Administrators, remise, release, and for ever quit Claim, unto [David Jones, Citizen and Loriner of London] his Heirs, Executors and Administrators, all and all Manner of Actions, Cause and Causes of Actions, Suits, Bills, Bonds, Writings obligatory, Debts, Dues, Duties, Accompts, Sum and Sums of Money, Judgments, Executions, Extents, Quarrels, Controversies, Trespasses, Damages and Demands whatsoever, both in Law and Equity, or otherwise howsoever, which against the said [David Jones] I ever had, now have, and which I, my Heirs, Executors and Administrators, shall or may have, claim, challenge or demand, for or by Reason or Means of any Matter, Cause or Thing, from the Beginning of the World, to the Day of the Date of these Presents: In Witness whereof, I have hereunto set my Hand

* If the bargained Premises be redecmable, by a limited Time, a Proviso of this Nature is added,

and Seal, [the tenth Day of June,] and in the Year of our Lord, [1755.]

Sign'd, seal'd and deliver'd, (being first legally stamp'd, &c.

Henry Hart. (L. S.)

Of Wives, Children, and Servants.

THE Woman, at her Marriage, becomes wholly the Man's, together with all her moveable Goods, and if Goods be given to a married Woman, they all immediately become her Husband's: She cannot lett, fett, sell, give away, or alienate any Thing without her Husband's Consent, nor her very Apparel, which at her Husband's Decease goes to the Executor, or Administrator of her Husband (excepting her necessary Apparel) which, with the Consent of her Husband, she may give by Will, not otherwise by our *English* Laws.

The Wife, after her Husband's Death, having no Jointure settled before Marriage, may challenge the third Part of his Yearly Rents of Free-Lands, for her Life; and also the Thirds of the Rents of such Free-Lands as he sold in his Life-time, if she did not consent to a Fine: But she can claim no Thirds of such Lands as her Husband buys, when he has sold them again, and dieth, if he puts another Person's Name in the Deed, besides himself, when he bought them. But if her Husband died without a Will in Writing, leaving no Child, she will claim the Thirds, as above, and the Third Part of the Goods for ever, and the other two Thirds go to the next of his Kindred.

But if she be the Wife of a Free-man of the City of London, (he dying without a Will, leaving no Child, as before) she will challenge By Law, three Parts of four of her Husband's Goods and Chattels, and one Third of the Profits of his Free-Lands for Life, the Goods for ever. By a late Act of Parliament Persons since made free are not bound by this Law.

The Husband must answer to his Wife's Fault; if she wrong another by her Tongue, or by Trespas, he must make Satisfaction; and pay the Debts that she causeth, except he did before give notice, that they should not trust her. *This is disputable.*

A Woman cannot hope to have the Thirds of her Husband's Land, which he mortgaged before Marriage, till the Money's paid, and Mortgage be cancell'd.

96 *The YOUNG MAN's Companion.*

A Man and Wife are joint Purchasers of Land, to them and their Heirs and the Survivors, and Heirs; and if the Husband dies, the Wife may sell the Land without the Consent of their Children.

A Woman that kills her Husband is to be burnt alive.

If a Wife brings forth a Child, begotten by another before Marriage, but born after Marriage, the Husband must own the Child as Heir at Law.

A Wife cannot be a Witness for, or against her Husband, they two being but one in Law.

If a Wife bring forth a Child during her Husband's long Absence, though it be some Years, yet if he lived all the Time within this Island, he must father that Child; and if that Child be her first born Son, he shall inherit the Husband's Estate, if intailed, or left without a Will. *This has been lately tried, and decided otherwise.*

A Woman that doth not hear of her Husband for seven Years together, may marry another Man.

If a Woman have no Sons, but Daughters, the Lands, as well as Goods are equally divided amongst the Daughters, who are Coheirs.

Man and Wife are so fast joined by our Law, that they may not be wholly parted by our Law, by any Agreement between themselves; but only by the Sentence of a proper Judge, for Adultery, &c.

Of Children, Sons, and Daughters.

A FATHER may give all his Estate (not intail'd) to any one Child, the Consideration whereof keeps some Children in Awe.

A Son at the Age of 14, may chuse his Guardian, be an Executor, may consent to Marriage, (if not an Apprentice) may, by Will, give his Goods and Chattels, and become bound in Bonds, or Covenants for Necessaries, Food, Raiment, Schooling, &c.

At the Age of 15, he may be sworn to his Allegiance to the King.

At 21, he is said to be of full Age, may sell Land, (which in other Countries is not till 25) when the Heat of Youth is somewhat abated, and they begin to be stayed in Mind, as well as in Growth.

A Daughter at 7 Years may consent to marry, tho' she may afterwards dissent; at 9 she may consent to a Jointure.

At

At 12 she is able to confirm her former Consent to Marriage, and if at that Age she dissent not, she is bound: She may at that Age make a Will of her Goods, and become bound for Necessaries, &c.

At 13 she may receive her Lands into her own Hands, that are given, or fall to her. At 21 she may lett, sell, or will her Lands.

The eldest Son inherits all his Father's Lands, (if the Father died without a Will) and to the younger Children are disposed Goods and Chattels, and commonly the eldest Son's Wife's Portion.

If a Man marry a Wife having Free-Land, and she dieth, leaving a Child that is heard to cry, tho' he dieth presently, the Man shall have the Lands for his Life. This is called, *The Courtesy of England.*

Of Servants.

ORDINARY Servants are hired, commonly for a Year, (whereby they become Inhabitants of that Parish) at the End thereof, they may be free, (giving three Months Warning before) and may place themselves with other Masters; only it is accounted discourteous and unfriendly to take another Man's Servant, before Leave given by his Master; and indiscreet to hire a Servant without a Certificate of his Diligence, and Faithfulness, in the Service of his last Master, or somewhat to this Effect.

Memorandum, That I A. B. do certify, that C. D. the Bearer hereof, hath been an honest and faithful Servant unto me. Witness my Hand the 3d of May, 1755.

Forms of Receipts, Notes and Bills, &c. necessary to be copied over often, as Introductory to the Forming the Man of Business.

Various Forms of Acquittances, when an Apprentice, or Servant, receives Money for the Use of his Master, or Employer, &c.

RECEIVED the 27th of September, 1755, of Mr. Adam Brown, Nine Pounds, twelve Shillings, for my Master Daniel Cole, on Account,

L. 9 12 —

Per Timothy Taylor.

F

Re-

98 *The YOUNG MAN's Companion.*

Received the 3d of *October*, 1755, of *Charles Duncomb*, Forty-five Pounds, eight Shillings, six Pence, in full for my Master *Edward Ford*,

L. 45 08 06

Per *George Hunt*.

Received the 23d of *October*, 1755, of *Mr. James Todd* and Company, One hundred Pounds, for *Mr. Jonathan Harvey* and Partners,

L. 100 — —

Per *Richard Smith*.

Received the 15th of *May*, 1755, of the Honourable the *United East India Company*, Two thousand Pounds, ten Shillings, for *Mr. Durham* and Company,

L. 2000 10 —

Per *Thomas Turner*.

Received the 13th of *March*, 1755, of the Governor and Company of the Bank of *England*, Seven thousand forty-one Pounds, eleven Shillings, for *Mr. William Cox* and Company,

L. 7041 11 —

Per *Richard Young*.

Received the 25th of *March*, 1755, of the Worshipful Company of *Mercers*, Ninety two Pounds, for my Father *Edward Yates*,

L. 92 — —

Per *James Yates*.

Received the 31st of *May*, 1755, of the Right Honourable *Sir John Thompson*, Knt. Lord Mayor of *London*, Thirty Pounds, for the Use of the Artillery Company, *London*,

L. 30 — —

Per *John Blackwell*, Clerk.

Received the 13th of *August*, 1755, of *Mr. Edward Fox*, Ten Pounds, for a Quarter's Rent due at *Michaelmas* last, for my Master *George Jennings*,

L. 10 — —

Per *Christopher Jones*.

Received the 18th of *February*, 1755, of *Mr. Lewis Jones*, Twenty nine Pounds, six Shillings, in Part of a Bill of Ninety Pounds, payable to *Mr. Simon Williams*, or Order, due the 3d Instant,

L. 29 06 —

Per *Philip Norton*.

Received of *Mr. Andrew Cross*, by Order and on Account of *Mr. Humphry Hains*, One hundred Pounds, for

Mr.

The YOUNG MAN's Companion. 99

Mr. John Graham and Company, this 25th of November, 1755.

L. 100 — —

Per Thomas Pugh.

Received the 25th of Dec. 1755, of Mr. Benjamin Lawrence, by Order of Mr. Nicholas Frith, the Sum of One hundred Pounds, six Shillings, and eight Pence, on Account of Mr. Thomas Combs of Chelmsford: I say received for my Master Nathaniel Dove, and Partner,

L. 100 06 8

Per John Day.

Received of Capt. Thomas Carter, and Proprietors in the Engine for raising Water by Fire, Four hundred forty eight Pounds, for three Tons of Copper, at 16d. a Pound, for Mr. Thomas Bently and Company, this 24th of April, 1755.

L. 448 — —

Per Isaac Taylor.

Various Forms of Acquittances, upon Receipt of Money, by Masters and Men of Business themselves.

Received this 6th of April, 1755, of Messrs. Samuel and Simon Stewarts, Five hundred and Forty Pounds on Account,

L. 540 — —

Per William Bourne.

Received the 16th of May, 1755, of the Right Honourable William Parrot, Esq; the Sum of Two hundred and fifty Pounds, in full of all Demands, for Self and Company,

L. 250 — —

Per Henry Horton.

Received the 27th of November, 1755, of Mr. Matthew Powel, the Sum of Ten Pounds, ten Shillings, in Part of my growing Salary and Subsistence,

L. 10 10 —

Per Luke Clark.

Received the 12th of January, 1755, of Mr. Charles Took, Twenty-five Pounds, in full for the Difference of two thousand five hundred Pounds, Bank Stock,

L. 25 — —

Per Jacob Lane.

Received the 17th of May, 1755, of Mr. James Shaw, Thirty Pounds, in full for six Months Interest of twelve hundred Pounds, due at Lady-day last,

L. 30 — —

Per John Lower.

Received the 19th of *July*, 1755, by the Order, and for the Use of Mr. *Henry Mount*, of Mr. *Stephen Carr*, Eight Pounds ten Shillings, and allow'd for Taxes and Repairs one Pound ten, together the Sum of ten Pounds, in full for a Quarter's Rent due at *Michaelmas* last,

L. 10 — —

Per *Joseph Shelley*.

Received the 17th of *May*, 1755, of Mr. *Mark Hawkins*, Twenty five Pounds, in full for half a Year's Rent due at *Christmas* last, out of which, deducted for Taxes, five Pounds; and for Repairs two Pounds; I say received for, and by Order of *Robert Carey*, Esq;

L. 25 — —

Per *Caleb Morris*.

Received the 14th of *April*, 1755, by the Hands of Mr. *Peter Clarke*, by Order of *Christopher Lee*, Esq; Thirteen Pounds seven Shillings, allow'd for Taxes Thirty three Shillings, in all fifteen Pounds, being for half a Year's Rent due at *Lady day* last, from Capt. *Abraham Surry*,

L. 15 — —

Per *Job Hill*.

Received the 16th of *April*, 1755, of the Executors of *Gregory*, late Earl of *Hertford*, by the Hands of Mr. *Isaac Cotton*, the Sum of Seventy-five Pounds, in full for my half Year's Annuity due at *Lady-day* last,

L. 75 — —

Per *Charles Hurst*.

Received the 8th of *May*, 1755, of the Right Reverend *Nathaniel*, Lord Bishop of *Durham*, by the Hands of Mr. *Mitbael Mason*, the Sum of Ninety Pounds, in full for three Quarterly Payments of my Annuity due at *Michaelmas*, *Christmas*, and *Lady-day* last,

L. 90 — —

Per *William Crisp*.

Received the 1st of *May*, 1755, of *Robert Rogers*, Esq; and the other Owners of the Ship the *Prince Frederick*, the Sum of Seventy-three Pounds ten Shillings, in full for Cordage, Tackle, and Trimming, furnished the said Ship,

L. 73 10 —

Per *Abraham Withers*.

Promissory Notes by Bankers Apprentices, and Servants.

London, March 7th, 1755.

I PROMISE to pay the Honourable *Charles Congreve*, Esq; or Bearer, on Demand, Fifty Pounds,

For Sir *Richard Davis* and Partners,

L. 50 — —

Per *Charles Stokes*.

The YOUNG MAN's Companion.

103

London, October 5th, 1755.

I promise to pay to the Honourable Directors of the United *English* Company Trading to *East-India*, or Bearer, on Demand, Four hundred Pounds,

For my Father *Isaac Tuckey*.

Per *Thomas Dutton*.

£. 400 — —

London, November 9th, 1755.

I promise to pay to the Royal *African* Company, or Bearer, on Demand, Three thousand six hundred and forty-four Pounds, thirteen Shillings and six Pence, for my Masters *Jennings* and *Williams*,

£. 3644 13 06

Per *Adam Price*.

Promissory Notes for a Man's Self, &c.

I PROMISE to pay to Mr. *Nathaniel Carter*, or Bearer, on Demand, Seven hundred Pounds, May 17th, 1755.

£. 700 — —

Per *Luke Heath*.

I promise to pay to the Governor and Company of the Bank of *England*, Nine thousand Pounds, Value received this 4th of *June*, 1755, for Self and Partners,

£. 9000 — —

Per *Francis Gyles*.

London, August 2d, 1755.

I promise to pay Mr. *Edward Draper*, Cashier of his Majesty's Revenue of Excise, or Order, forty Days after Date, Four hundred and thirty Pounds, Value received.

£. 430 — —

Per *Christopher Wade*.

I promise to pay *Paul Parker*, Esq; or Order, on Demand, Three hundred and ninety four Pounds, two Shillings and six Pence, Value received this 16th of *April*, 1755.

£. 394 02 06

Per *Philip Venban*.

I promise to pay to Sir *Solomon Haines*, or Order, the Sum of Thirty Pounds in Manner following; Ten Pounds, Part thereof, two Months after Date, ten Pounds more the 17th of *March* next, and the remaining ten Pounds the 24th of *June*, 1755, Value received: Witness my Hand, at *London*, the 27th of *May*, 1755.

£. 30 — —

Per *Moses Spike*.

Borrowed and received of Mr. *Aaron Granger*, the Sum
E 3 of

of One hundred Pounds Sterling, which I promise to pay upon Demand: Witness my Hand this 14th of *August*, 1755,

L. 100 — —

Per *Nicholas Needham.*

Witness, *John Brown,*
George Radford.

I promise to pay to Capt. *Alexander Moor*, or Order, on Demand, Eighteen Pounds, eight Shillings, and nine Pence, furnished by my Order to Lieutenant *Charles Cornwall*, as appears by his Receipts delivered this 24th of *May*, 1755, to me.

L. 18 08 09

Per *Hugh Harold.*

London, June 5th, 1755.

I promise to furnish Mr. *Gregory Fitz Harding*, on Demand, with Bills of Exchange to the Value of five thousand Pounds Sterling, at the Price current, payable to himself, or Order, in *Messina*, the next ensuing Fair, Value of Sir *John Scot* received;

L. 5000 — —

Per *Edward Lloyd.*

I promise to pay to *George Grove*, Esq; or Order, the Sum of fifty Pounds on Demand, after Receipt of a Bill of Exchange drawn the 20th current, by *Humphry Hughs* on *Henry Palmer* of *Southampton*, Maltster, for the like Sum, payable to *William Pierce*, Esq; or Order, which the said *George Grove* has indorsed to me this 28th of *January*, 1755.

L. 50 — —

Per *Abraham Wingfield.*

I promise to return to her Grace the Dutchess Dowager of *Tredegar*, or Order, on Demand, one Casket of Jewels, seal'd, one hundred of Gold Plate, three hundred and fifty of ditto Silver, seventy Caracts of Oriental Pearl, and a thousand Pound Bank Note received of her Grace, this 4th of *June*, 1755, for Self and Company,

Timothy Ward.

A Bill of DEBT.

K NOW all Men by these Presents, that I *Jacob Simms*, of the Parish of *St. Margaret, Westminster*, Gent. do own and acknowledge myself justly to stand indebted to *Robert Johnson*, of the Parish of *St. Leonard, Foster-Lane, London*, Haberdasher, the just Sum of ten Pounds of good and lawful Money of *Great-Britain*, and which I do hereby promise to pay unto him the said *Robert Johnson* on the

20th

20th Day of *July* next ensuing the Date hereof. Witness
my Hand this 12th Day of *June*, in the Year of our Lord,
1755. *Jacob Simms.*

A N O T H E R.

Memorandum, That I *Leonard Henchman*, of the Parish
of *St. Dunstan* in the East, Citizen and Salter of *Lon-*
don, do owe and am indebted to *William Curtis* of the said
Place, Grocer, the Sum of Forty Pounds of good and law-
ful Money of *Great Britain*; which Sum I promise to pay
to the said *William Curtis*, his Executors, Administrators, or
Assigns, on or before the 10th Day of *December* next. In
Witness whereof, I have hereunto set my Hand and Seal
the 7th Day of *May*, in the Year of our Lord 1755.

Sign'd, seal'd, and deliver'd,

(being first legally stamp'd) *Leonard Henchman.* (L.S.)
in Presence of *William Salter.*

William Young.

A Promissory Note, mentioning Order, is indorsable from
one Person to another, which is done by the present Pos-
sessor's writing his Name on the Back of it, and delivering
it up to the Party, to whom he intends to assign over his
Property therein.

It is unnecessary to have a Promissory Note, payable to
Bearer, indorsed, if you are satisfied the Note is good.

The delivering up a Promissory Note to the Person who
sign'd it, is a sufficient Voucher of its being paid; nor is
there any Need of writing a Receipt thereon.

Promissory Notes, and Book Debts, if not legally de-
manded in the Space of six Years, cannot be recovered by
Law, upon the Debtor's pleading the Statute, but they are
recoverable in Chancery.

If you keep a Promissory Note upon Demand, in your
own Hands above three Days, and the Person it is upon
should fail, the Loss will be your own; but if he fail within
three Days, it will light in Equity on the Person that paid
it you.

Promissory Notes.

Borrowed and received of *Francis Forcer*, Esq; Fifty
Pounds, which I promise to pay to him, or Order, on
Demand. Witness my Hand this 29th of *September* 1755.

L. 50 — —

Per John Cast.

Borrowed

Borrowed and received of Mr. Thomas Wightman, Twenty Pounds, which I promise to pay to him, or Order, three Months after Date. Witness my Hand this 14th of August 1755.

£. 20 — —

Per Daniel Cole.

I promise to pay to James Forth, Esq; or Order, One hundred Pounds, fifteen Shillings, on Demand, Value received. Witness my Hand this 17th of July, 1755.

£. 100. 15 —

Per Roger Meredith.

I promise to pay to Mr. Isaac Fletcher, or Order, Forty-nine Pounds, thirteen Shillings and seven Pence Half-penny, six Months after Date, Value received. Witness my Hand this 23d of May, 1755.

£. 49. 13. 07 $\frac{1}{2}$

Per William Jones.

N. B. Observe in Promissory Notes, that the Value received is mentioned; or they are of no Force.

BILLS of PARCELS.

A Linnendraper's Bill.

The Honourable the Lady Molefworth,

1755,

Bought of Simon Eaton and Partner,

March 14,

s. d.

l. s. d.

16 Ells of Dowlas — at 1 4 per Ell — 1 1 4

22 $\frac{1}{2}$ Ells of Holland at 3 4 — — 3 15 —

1 Piece of Cambrick — — — 3 4 6

A Piece of Muslin — — — 2 17 3

85 $\frac{1}{2}$ Ells of Diaper at 1 10 — — — 7 16 9

19 $\frac{1}{2}$ Ells of Damask at 4 3 — — — 4 2 10 $\frac{1}{2}$

£. 22 17 8 $\frac{1}{2}$

An Hosier's Bill.

Mrs. Anne Pitt,

1755.

Bought of Isaac Web.

April 10,

s. d.

15 Pair of Womens worsted mixt at 5 7 per Pair

23 Do of Mens Silk — — — at 17 4 — —

22 Do of Mens Yarn — — — at 3 2 — —

18 Do of Norwich Hose — — — at 4 9 — —

38 Do of Thread — — — at 3 4 — —

13 Do of Womens Gloves Silk at 4 7 — —

Mada
175
April
15 $\frac{1}{2}$ Y
3 Pair
6 Doz
7 Sarc
16 Far
APs. c

The R
175
Februa
36 Chi
18 Dif
2 $\frac{1}{2}$ Pair
of B
A Tea
Indian
qt. 1
Fine C

Mrs. K
175
7 Doz
8 $\frac{1}{2}$ Hu
9 Rop
1 Bush
43 Do
Sevi
12 Por

Mr. C
175
March
8 Hun
1 Hun

105

၆၀ ရွာလုံး

Bought of *Mary Hale*.

s. d. l. s. d.

s. d. l. s. d.

$$2 \quad 3 \text{ ————— } 12 \quad 1\frac{1}{2}$$

9 4 per Pair 8 -

1 3 pr Pair 4 10 -

$$4 \cdot 6 \cdot \frac{1}{10} = 6 \cdot \frac{1}{10} = \frac{6}{10} = \frac{3}{5}$$

3 3 ——— 2 12 —

3 10 pr Yard 1 1 2 1 4

f. 22, 13, 11, $\frac{1}{2}$

1870-1871

Bought of Mary Tombs,

l. s. d.

l. s. d.

○ 3 8 each

9.10 6 —

— — 13 10 6

— — 3 18 4

100

0 9 -

3 3 - per Piece

1. 10/10/2010

Bought of Samuel Lemon.

Bought of Samuel Lemon.

at 2 3 per Dozen

at 7 2 per Hundred

at 1: 6 per Rope

at ———— 7 10

17. *... of ...*

1 2 per Do

1994

Bought of Robert George.

l. s. d.

l. s. d.

7 10 6 per C.

8 12 6

F. 5 4 Hun.

106 *The YOUNG MAN's Companion.*

		<i>l.</i>	<i>s.</i>	<i>d.</i>	
4 Hundred of Stockfish	— at 4	10	6	pr C.	
4 Caggs of Sturgeon	— at 0	16	10	pr Cagg	
6 $\frac{1}{2}$ Barrels of Herrings	— at 3	10	1	pr Bar.	
95 Dried Salmon	— at —	1	2	each.	

A Druggists Bill.

James Smith, Esq;

Bought of *William Robinson*, Feb. 10, 1755.

		<i>s.</i>	<i>d.</i>	
27 $\frac{3}{4}$ of Smyrna Coffee	— at 5	8	per Pound	
33 Pounds of Mocha do	— at 5	4		
26 $\frac{1}{2}$ Do of Imperial Tea	— at 25	—		
10 $\frac{3}{4}$ Do of best Bohea	— at 14	6		
13 Do of Royal Green Tea	— at 18	8		
21 Do of Sug. double refined	at 1	$\frac{1}{2}$		

A Salter's Bill.

Mrs. Lane,

1755.

Bought of *Mark Norton* and Partner,

November 5,

		<i>s.</i>	<i>d.</i>	
13 Pounds of Anchovies	— at 1	4 $\frac{1}{2}$	pr Pound	
30 Do of Capers	— at —	10 $\frac{1}{4}$		
12 $\frac{3}{4}$ Do of Salt Petre	— at 1	2 $\frac{1}{2}$		
2 $\frac{1}{3}$ Gallons of pickled Mush-rooms	— at 3	7	per Quart	
4 $\frac{1}{8}$ Gallons of Lucca Oil	— at 12	—	per Gallon	
A Westphalia Ham, wt. 20 lb.	at —	11 $\frac{1}{2}$	per Pound	

A Pewterer's and Brazier's Bill.

Mr. Edward Rawlinson,

1755,

Bought of *George Harbin,*

October 20,

		<i>l.</i>	<i>s.</i>	<i>d.</i>	
Hard Metal Plates 3 Dozen, wt. 50 lb.	at —	1	4	pr. Pound	
8 Dishes do, a Monteth, and Cul-ender, wt. 40 lb.	— at —	1	6	Do	
A Copper with a discharging Cock, wt. 66 $\frac{1}{2}$	— at —	1	4 $\frac{1}{2}$	Do	
Iron Work to do, and a Crane, wt. 97	at —	—	2 $\frac{3}{4}$	Do	
A Stove, Grate, with Shovel, Tongs, Poker and Fender, —	— at	—	1	18 6	
A large Brass-pot and Saucepan, wt. 38	at —	1	7	pr Pound	

A Furrier's Bill.

Mr. Luke Frith,

1755,

Bought of Francis Howard,

May 5.

s. d.

Coney Skins 1300 — at 13 6 / per Hundred

Beaver Do 180 lb. — at 7 8 per Pound

A Sable Muff and Tippet — allowed at 21 —

Fitch Skins 90 — at — 3½ per Skin

Otter Skins 50 — at 3 —

Hare Skins 140 — at 9 6 per Hundred

A Leatherfeller's Bill.

Mr. Edmund Naff,

1755,

Bought of Adam Leigh,

November 16,

s. d.

Large oil'd Lamb Skins 215 at 1 3½ per Skin

Gl at Skins — 130 at — 11¼ Do

Allom'd Sheep Skins — 137 at 1 3 Do

Calves Skins — 19 at 4 3 Do

Oil'd Buck — 15 at 12 9 Do

Russia Hides — 82 at 12 6 Do

A Cheesemonger's Bill.

Capt. Obadiab Parsons,

1755.

Bought of Thomas Wilson,

December 12,

C. q. lb. l. s. d.

12 Old Cheshire Cheeses 5 2 24 at 1 17 4 per C.

45 Gloucestershire Cheeses 4 3 10 at 1 12 6 —

3 Tedder Cheeses — 2 3 25 at 2 16 10 —

8 Flitches of Bacon, wt. 49 Stone at — 3 4 pr Stone

12 Firkins of Butter — at 1 10 — each

Suffolk Butter — 12 Wey — at 8 3 8 pr Wey

A Grocer's Bill.

Mr. William Marriot,

1755,

Bought of George Davis and Company,

March 12,

C. q. lb. l. s. d. l. s. d.

Sugar 2 Hhds. nt. 17 2 17 at 1 3 10 p. C. 21 — 8

Raisins 3 Barrels 12 1 19 at 1 14 5 — 21 7 5½

Tobacco 1 Hhd. 4 — 12 at 4 19 4 — 20 7 11½

Rice 1 Barrel — 1 1 5 at 2 16 4 — 3 12 11

Pepper 1 Bag — 1 3 19 at 3 12 4 — 6 18 8½

Brimstone

108 *The YOUNG MAN's Companion.*

	C. q. lb.	l. s. d.	l. s. d.
Brimstone ———	2 1 19	at 1 19 1	pr C. 4 14 6 $\frac{1}{2}$
Bees Wax 3 Cakes —	2 2 12	at 1 18 4	—— 4 19 11 $\frac{1}{2}$
			<u>£. 83 2 2$\frac{1}{2}$</u>

A Mercer's Bill.

Mrs. *Jane Somerset,*

Bought of *Edmund Birch,* and *Oswald Oakley,*

Nov. 9, 1755.

	s. d.	l. s. d.
12 $\frac{3}{4}$ Yards of rich brocaded Sattin } at 18 6 pr Yard	11 15 10 $\frac{1}{2}$	
6 Yards of Mohair ———	at 4 2 ———	1 5 —
25 $\frac{1}{4}$ Do of Paduasoy ———	at 11 8 ———	14 14 7
15 $\frac{1}{2}$ Do of flower'd Damask ———	at 8 8 ———	6 14 4
34 $\frac{1}{4}$ Do of Poplin ———	at 3 ———	5 2 9
12 $\frac{1}{2}$ Do of <i>Italian</i> Mantua ———	at 7 2 ———	4 9 7
30 Do of double Taffaty ———	at 2 9 ———	4 2 8
		<u>£. 48 4 7$\frac{1}{2}$</u>

When the Money is paid down, either of the Partners may write,

Receiv'd at the same Time of Madam Somerset, the Sum of Forty-eight Pounds, four Shillings and seven Pence, in full of all Demands, for Self and Partner,

Per Oswald Oakley.

A Woollen-Draper's Bill.

Mr. *Charles Tomlins,*

Bought of Sir *William Ashurst* and Company.

Feb. 8, 1755,

	s. d.	l. s. d.
10 $\frac{1}{2}$ Yards of <i>Yorkshire</i> Cloth at 6 6 per Yard	3 8 3	
7 Do of fine <i>Spanish</i> Black at 16 3 ———	5 13 9	
6 $\frac{3}{4}$ Do of fine grey Cloth at 15 9 ———	5 6 3 $\frac{1}{2}$	
16 $\frac{1}{4}$ Do of Frieze ——— at 3 6 ———	2 18 7 $\frac{1}{2}$	
4 Do of fine Drab ——— at 15 6 ———	3 2 —	
5 $\frac{1}{2}$ Do of superfine <i>Spanish</i> Cloth } at 18 6 ———	5 8 8 $\frac{1}{4}$	
31 Yards of Livery Scarlet Cloth } at 13 ———	20 3 —	
		<u>£. 46 — 7$\frac{1}{2}$</u>

Received at the same Time the full Contents for Sir Wm. Ashurst and Company,

Per Michael Medcalf.

BILLS on BOOK-DEBTS.

An Upholsterer's Bill.

The Right Honourable the Lord Bolton, Dr
To Paul Fellows.

1755,		l.	s.	d.
April 19.				
	A rich Crimson Damask Bed laced compleat	75	—	—
May 4,	A Set of Window Curtains and Vallance Do	16	11	8
—7,	A fine Carpet, Counterpane and an Otter Down Quilt	12	10	—
June 6,	A Crimson Velvet easy Chair, and 2 Stools Do	13	7	6
—13,	A wrought Bed Dimity, and Furniture compleat	28	18	4
Aug. 10,	A Down Bed, Bolster, Pillows, with a Mattress and Quilt	15	—	—
—16,	Chairs 10, with two-arm'd Do Walnut-tree fram'd	34	12	6
	Sum	£. 196	—	—

If a Servant receives the Bill, let the Receipt run thus,
Received the 30th of December, 1755, of the Right Honourable the Lord Bolton, by the Hands of Mr. Simon Steward, the full Contents for my Master Paul Fellows,

Per A. Glover.

A Goldsmith's Bill.

The Right Honourable Sir Michael Newton, Knight of the Bath, Dr

1755,	To John Nichols.	oz.	dwt.	gr.	s.	d.
May 31,						
	For a Silver Set of Castors —	25	10	10	at 7	9
July 7,	Half a Dozen of Soup Plates	85	14	15	at 6	6
—10,	A Silver Tea-pot and Lamp	29	16	15	at 6	4
Aug. 9,	A large Punch Bowl	67	—	16	at 6	9
—11,	A Dozen desert Knives, Forks, and Spoons, with a Shagreen Case				20	—
Nov. 6,	A Dozen Silver Spoons	33	11	10	at 6	2

110 *The YOUNG MAN's Companion.*

A Cabinet-Maker's Bill.

Her Grace the Dutchess of Newcastle, Dr.

1755, To Caleb Loudham,

October 2,	A Chimney Glass, and a Pair of Sconces	l. s. d.	5 18 —
Oct. 8,	A Pair of Peer Glasses 72 Inches, in gilt Frames		30 — —
— 10,	A Pair of India Cabinets 43 L. — 10s. each		87 — —
— 20,	A fine Indian four-leav'd Screen, and a Fire Screen		17 10 —
Nov. 18,	A Book Case with Glass Doors, and a Corner Cupboard, Do		21 — —
— 30,	A Walnut-tree Table, and a Set of Dressing Boxes japan'd		3 4 10
Decem. 7,	A Tea-Table and Stand plated, wt. 103 oz. at 8s. 4d. per Ounce		42 18 4
— 30,	A Dozen and a Half of fine matted Chairs at 8s. 6d. each		5 2 —
			£. 212 13 2

Received the 28th of December, 1755, of her Grace the Dutchess of Newcastle, Fifty Pounds in Part of this Bill for Mr. Caleb Loudham, Cabinet-Maker,

Per Israel Ruffel.

A Factor's Bill.

Messrs. Somerset and Draper, Drs

1755, To Joshua Cox and Company,

September 3,	For Serge de Nismes 13 Ps each, 30 Yds	s. d.	l. s. d.	75 11 3
Sept. 7,	Silk Drugget 24 each 28 $\frac{1}{2}$ Yards		at 3 10 $\frac{1}{2}$ per Yard	199 10 —
Oct. 2,	Grograms 30 each 41		at 2 8 Do	164 — —
— 19,	Silk Camblets 11 each 40 Yards		at 3 1 $\frac{7}{8}$ Do	69 — —
Nov. 6,	Duroys 40 —		at 32 — per Piece	64 — —
— 30,	Shalloons 51 —		at 50 —	127 10 —
—	Anterines 10 each 26 $\frac{1}{2}$		at 2 2 per Yard	28 14 2
Dec. 10,	Sagathies 23 each 30 Yards		at 1 4 Do	46 — —
			£s. 774 05 5	

A

A Lighterman's Bill.

Sir Basil Brown, Dr

To Moses Clarkson,

1755,			<i>l.</i>	<i>s.</i>	<i>d.</i>		<i>l.</i>	<i>s.</i>	<i>d.</i>
June 12,	Coals in the Pool	40 Chaldrons at	1	4	6	per Ch.	49	—	—
	Meetage of	42 Chaldrons — at	—	—	8		1	8	—
	Lighterage of Do	— at	—	—	10		1	15	—
	Wharfage of Do	— at	—	—	2		—	7	—
	Cartage of said	40 Chaldrons at	—	2	6		5	—	—
							£.	57	10 —

N. B. One and twenty Chaldrons are the Score of Sea Coal.

A Wine-Cooper's Bill.

Mr. James Hall, Dr

To William Morton,

1755,			<i>s.</i>	<i>d.</i>
Mar. 28,	Palm Sack	18 Gallons at	10	6 per Gall.
Apr. 13,	Port Red	35 Do — at	5	4 —
May 26,	Sherry	17 Do — at	6	6 —
— 31,	Rhenish	19 Do — at	6	8 —
July 13,	White Lisbon	32 Do — at	4	10 —
— 20,	A Chest of Florence	agreed for	—	4 —

A Bricklayer's Bill.

Sir Edward Cornwall, Dr

To Timothy Bright, for Work and Materials in his House
on Tower Hill, London.

1755,			<i>s.</i>	<i>d.</i>		<i>l.</i>	<i>s.</i>	<i>d.</i>
Mar. 28,	Bricks	25 Thousand at	15	7 pr M,	19	9	7	
— 30,	Tiles	11 Do — at	19	5 —	10	13	7	
Apr. 1,	Lime	28 Hundred at	15	11 pr H.	22	5	8	
— 12,	Sand	19 Load — at	3	11 pr L.	3	14	5	
May 24,	Ridge Tiles	149 — at	8	1 pr H.	—	12	—	$\frac{1}{2}$
June 28,	Work for myself	} at	3	— pr D.	13	10	—	
	90 Days							
—	Do for a Labourer	90 at	1	8 —	7	10	—	
—	Do for my Man	90 — at	2	6 —	14	5	—	
							£.	89 — 3 $\frac{1}{2}$

Note, A Brick ought to be 9 Inches long, 4 $\frac{1}{2}$ broad, and 2 $\frac{1}{2}$ thick. 500 Bricks are a Load, a thousand Tiles the like,

112 The YOUNG MAN'S Companion.

25 Bushels are a Hundred of Lime; about 3000 Bricks will make a Rod of Brick work, viz. $272\frac{1}{2}$ square Feet, a Brick and a Half thick.

The Right Honourable Charles, Lord Bruce, Dr
For Bricklayers Work at *Savernacle, Wilts*, performed by
Philip West.

	l.	s.	d.		l.	s.	d.
Brick-work 50 Rods 68 Feet Statute Measure	} at 5	10	—	pr Rod	276	7	$5\frac{1}{2}$
Tyling plain 15 Square 39 Feet							
	} at 2	4	—	pr Square	33	17	2
Rubb'd Return 250 Feet							
Straight Arch 72 Feet	at —	2	—	—	—	7	4
Jack Arch 36	at —	2	3	—	—	4	1
Paving with 10 Inch Tiles, 1769 Feet	} at —	—	$3\frac{1}{2}$	—	25	15	$11\frac{1}{2}$
Measured July 10, 1755,							
per William Stock.					£. 384	15	7

A Builder's Bill.

The Right Honourable Richard Earl of Castlemain, Dr
To Nathaniel Taylor, for Work and Materials in his House
at *Henley Park, Surry.*

	l.	s.	d.		l.	s.	d.
1755 March 27, Oaken Timber 12 Load	} at 2	5	—	a Ton	33	15	—
— 30, Fir Timber 35 Ton							
April 5, Oaken Plank 96 Foot	} at —	—	$3\frac{1}{2}$	pr Foot	1	8	—
— 16, Norway Deals 590							
— Sixpenny Nails 29 Thousand	} at —	3	10	per M.	5	11	2
May 5, Ten Groat Nails 300							
June 28, Work for myself 90 Days	} at —	3	4	—	15	—	—
— Do for 3 Men 90							
— Wainscot 73 Yards 7 Feet	} at —	3	2	pr Yard	11	13	$7\frac{1}{2}$
— Double Quarter 58 Feet							
	} at —	—	4	pr Foot	—	19	4
					£. 155	9	$8\frac{1}{2}$

Note,

The YOUNG MAN'S Companion.

113

Note, Deals and Nails are 120 to the Hundred; 50 Feet are a Load, and 40 Feet a Ton of Timber.

A Corn-Chandler's Bill.

The Reverend Mr. Edward Collings, Dr
To John Pearson and Partners.

1755,			s.	d.	
Mar. 27,	Oats	— 5 Qrs. — at 2 3	per Bushel		
April 9,	Beans	— 9 Bush. — at 4 10			
May 16,	Bran	— 7 Qrs. — at 1 10			
June 19,	Tares	— 19 Bush. — at 1 11			
— 24,	Pease	— 16 Do — at 3 11 $\frac{1}{2}$			
July 2,	Pale Malt	28 Do — at 3 2			

A Dyer's Bill.

Messrs. Drake and Compton, Drs
For dying the Goods following, delivered by their Order
to Edward Eaton, Packer.

		Ps.	s.	d.	
May 7,	Exeter Stuffs, yellow	73 at 14	—	pr Piece	
— 13,	Norwich Do blue	30 at 11	6		
— 20,	Tamies black	42 at 12	8		
July 1,	Colchester Bays green	28 at 9			
— 28,	Camlets Orange	21 at 15			

An Upholder's Bill.

Mr. Rowland Lee, Dr
To William Ward and Company.

		l.	s.	d.	
Oct. 7,	For Superfine $\frac{1}{4}$ Blankets	17 Pr. at 1 3	9 pr Pr.		
— 9,	Medium Do	13 — at — 13	6 Do		
—	Harreteen blue	31 Ps. at 2 8	— pr Ps.		
Nov. 6,	Cheney Do	20 — at 1 18	— Do		
— 18,	Green Lintseys	10 — at 1 8	— Do		
Dec. 9,	15 printed Callico Quilts $\frac{8}{4}$	— at — 16	— each		

A Silkman's Bill.

Mrs. Anne Finch, Dr
To Samuel Palmer and Partner.

1755,		lb.	s.	d.	
July 30,	For Tripoli Belladine Silk	44 at 19 8	per lb.		
Aug. 10,	Legge of Smyrna	12 $\frac{1}{2}$ at 16 7	Do		
— 14,	A Fangot of raw Silk	130 at 13 8	Do		

Sept.

114 *The YOUNG MAN's Companion.*

	lb.	s.	d.	
Sept. 15, Do of <i>Ardas</i> —	118	at 12	4	per lb.
— 30, Gold and Silver Twist	17	at 6	4	per oz.
— — Twisted Silk in Grain	12 $\frac{1}{4}$	at 3	—	Do —

An Ironmonger's Bill.

Mr. Charles Richardson, Dr

1755,

To Joseph Lewis.

		s.	d.	
June 10,				
For Spring Door-Locks with Hinges	19	at 4	3	each
June 19, Bolts 42 Pounds	—	at —	9	per lb.
Aug. 1, Birmingham Brass Locks	30	at 7	6	each
— 24, A Cast Iron Back wt.	1 3 10	at 14	8	per H.
Sept. 10, Sheffield Nails wt.	— 2 1 12	at —	4 $\frac{5}{8}$	per lb.
— 21, Plate Iron wt.	— 3 3 —	at —	6 $\frac{1}{4}$	Do

A Druggist's Bill.

Messrs. Obadiab and Joseph Oram, Drs

1755,

To Thomas Mount and William Eaton.

	lb.	l.	s.	d.	
Oct. 13,	C.				
For Galls wt.	1 $\frac{1}{2}$ Gr. 12 Tr. lb.	at —	—	9 $\frac{1}{2}$	per lb.
Oct. 27, <i>Mexica</i> Cochineel	18 $\frac{1}{8}$	at 1	12	7	Do
Nov. 16, Scammony	— 37 $\frac{1}{2}$	at —	10	—	Do
— 20, Gum <i>Arabick</i>	— 127	at —	—	8 $\frac{1}{8}$	Do
Dec. 1, Sassafras	— 3 $\frac{1}{4}$ Hundred	at —	—	3 $\frac{1}{2}$	Do
— 31, Opium	— 10 $\frac{1}{2}$ Pounds	at —	6	—	Do
Jan. 11, Tea 1 Canister	75 Pounds	at —	13	8	Do

A Tobacconist's Bill.

Mr. Humphry Hughs, Dr

To Thomas Stubbs.

		s.	d.	
March 27, For 1 Hhd. of best				
bright Tobacco qt. nt. 5 C $\frac{1}{2}$		at —	10 $\frac{1}{8}$	per lb.
April 15, 1 Box of Oronooko				
qt. nt. 75lb. $\frac{1}{2}$		at —	11 $\frac{1}{2}$	—
— 19, 5 Bags of old <i>Spanish</i>				
qt. nt. 684 lb.		at —	4 $\frac{1}{8}$	—
May 25, $\frac{1}{2}$ Hhd.—qt. Gr. 335				
Tr. 42 is nt. 293 lb.		at —	5 $\frac{3}{8}$	—
— 27, 2 Rolls qt. nt. 94		at 1	5 $\frac{1}{8}$	—

BILLS

115

Mr. Samuel Robinson, London, May 4, 1755.
Bought of William Stapleton, 6 Bales of French Cloth, to pay
at 6 Months, as follows, viz.

William Cobb, Esq. *October 21, 1755.*
Bought of *James Jones* and Partner, 8 Bags of *Farnham*.
Hops for ready Money.

William Cobb, Esq.:

October 21, 1755.

Bought of James Jones and Partner, 8 Bags of Farnham Hops for ready Money.

C. q. lb.

Nº	wt.	2	2	18
1	—	2	3	10
2	—	2	2	17
3	—	2	1	—
4	—	3	—	8
5	—	3	1	3
6	—	3	—	20
7	—	2	2	7
8	—	2	2	7

C. 22 1 27 at 11d. per Pound £. 115 9 1

Mr. Daniel Wright,

London, Jan. 7, 1755.

Bought of Philip Pagne, 6 Casks of Barbadoes Sugar, at a Month, viz.

C. q. lb.

g. lb.

N ^o 81	— wt. —	8 3 23	Tare	3 7 each
82	—	8 2 21		8 multiply
83	—	8 — 12		
84	—	8 1 16		
85	—	7 2 20		
86	—	8 — 16		

Groß 49 3 24

Tare 6 2 —

Nett 43 1 24 at 47 6 per C. £. 103 4 6 ²/₂

Mr.

116 *The YOUNG MAN's Companion.*

Mr. Richard Sands,

Bought of Anne Smart and Company, September 13, 1755,

5 Buts of Rape Oil, viz.

		C. q. lb.	q. lb.	
N ^o 43	— wt: —	10 — 10	Tare 2 13	
48	—	11 2 18	— 2 13	
51	—	10 1 —	— 2 13	
57	—	11 — 12	— 2 21	
60	—	12 3 18	— 2 9	
	Gross	56 — 2	C. 3 — 13	
	Tare	3 — 13	deduct	l. s.
	Nett	52 3 17	is 790 Gall. at 23	16 per Ton

£. 79 13 4

Note, The Tun of Sweet Oil is 236 Gallons, and 7 lb. ¹/₂ Nett Weight makes a Gallon of Oil.

Sir Andrew Gosling and Company,

Bought of the United East-India Company, at 4 Months,

November 27, 1755.

Pepper, 2 Lots, viz.

		C. q. lb.	lb.	
N ^o 17	— 10 Bags qt.	27 1 18	Tr. 150	
20	— 10 Do —	24 3 24	— 138	
	Gr.	52 1 14	288 or	
	Tr.	2 2 10	2 2 10	
	Nett	49 3 4	at 10d. ² / ₃ per lb. is	

£. 241 — 11

Red-wood 2 Lots, viz. Ton C.

N ^o 47	— 120 Sticks —	10 13 ³ / ₄	
48	— 100 Do —	11 12	l. s.
	220 Sticks wt.	22 5 ³ / ₄	at 3 7 pr Ton £. 74 13 3

Wormfeed 3 Bales, viz.

		C. q. lb.	
N ^o 18	— wt. —	3 1 10	
24	—	4 2 —	
37	—	2 3 19	
	Gr.	10 3 1	
	Tr.	1 — 15	
	Nett C. 9	— 14	at 13d. ¹ / ₂ pr lb. — £. 60 12 9

£. 376 6 11

Mr. Peter Davis and Company,

London, April 24, 1755.

Bought of Titus Tradewell for ready Money, Cotton 14

Bags, viz.

	C.	q.	lb.		N ^o	C.	q.	lb.
N ^o 1 — qt.	3	1	7		17	2	3	16
2 —	2	3	—		24	3	1	10
3 —	2	3	5		25	3	—	27
4 —	3	—	15		26	2	3	4
	11	3	27		12	1	1	
	12	1	1					
	24	1	—	Total Gross.				
	—	3	13	Tare allow'd.				
	23	1	15	Suttle 2619 Pounds.				
				Trett 100				

More, viz.	C.	q.	lb.	Nett 2519 at 14 d. pr lb. is,
N ^o 30 —	2	3	12	L. 146 18 10
31 —	3	—	10	} Damag'd.
32 —	3	1	26	
33 —	3	2	3	
34 —	2	2	7	
35 —	1	3	10	
	17	1	12	Gross.
	—	2	11	Tare.
	16	3	1	Suttle 1877 Pounds.
				Trett — 77
				Nett 1800 at 4d. pr lb. L. 30 — —
				L. 176 18 10

OF ARITHMETICK.

HAVING now given you a View of the necessary Precedents, and different Forms of various Businesses, which we will suppose, by your careful observing and copying over, may have brought you to a tolerable Notion and Method, even before you are engag'd in real Practice, we come next to Arithmetick; the Knowledge of which is so necessary, that scarce any Thing in Life, and nothing in Trade can be done without it.

And

And first of *Notation*, and *Numeration*.

In *Notation* we must observe that all Numbers may be, and now generally are expressed by, or composed of, the ten Figures or Characters following, *viz.*

One, Two, Three, Four, Five, Six, Seven, Eight, Nine, Cypher.
 1 2 3 4 5 6 7 8 9 0

Nine of these are called significant Figures, to distinguish them from the Cypher, which of itself signifies Nothing; but as it is placed (in whole Numbers) serves to increase the Value of the next Figure or Figures that stand before it; as 3 is but three: but before the Cypher thus, 30, the 3 becomes thirty, &c. — We are to Note, that every one, or any, of the above nine Figures or Digits, have two Values; one certain, and another uncertain; the certain Value is, when it stands alone by itself; the uncertain is, when joined or placed with other Figures or Cyphers; for when any one of these Figures stand alone, it signifies no more than its own simple Value; as 5 is but five, 4 but four, 6 but six, and 3 no more than three, &c. And this is the certain Value of a Figure; but when another Figure or Cypher is annexed, they then are increased in their Value ten Times; as 5, or 5 Units, or Ones, to 5 Tens, or Fifty, 4 to 4 Tens, or Forty, 6 to 6 Tens, or Sixty, and 3 to 3 Tens, or Thirty; as thus, 51, Fifty one; 42, Forty-two; 63, Sixty-three; 34, Thirty-four, &c. Again, if any of the said Figures stand in the third Place towards the Left-hand, they then signify so many Hundreds as singly they express Units or Ones; as 500 is Five hundreds, 400 Four hundreds, 600 Six hundreds, and 300 Three hundreds, &c. If any of them possess the 4th Place towards the Left-hand, they are so many Thousands as they contain Units: And so any, or every Figure, increases by a Ten-fold Proportion, from the Right-hand to the Left, according to the Place it is found or stands in; so that 5 may be but Five, or Fifty; Five hundred, or Five thousand: In the first Place, 5; in the second, 50; in the third, 500; and in the fourth Place, 5000, &c. And therefore, this is the uncertain Value of a Figure: But the true Value of Figures in Conjunction, may be fully learnt and understood by the following Table.

The Numeration Table.

[illegible]

For the easier Reading of any Number, first get the Words at the Head of the Table by Heart ; as Units, Tens, Hundreds, Thousands, &c. and apply thus, 75, five Units, Five, and 7 Tens, Seventy, that is, Seventy five. Again, 678 ; 8 Units, Eight, 7 Tens, Seventy ; and 6 Hundreds, six Hundred ; that is, Six hundred seventy eight. Once more, 3456 ; 6 Units, Six ; 5 Tens, Fifty ; 4 Hundreds, four Hundred ; 3 Thousands, three Thousand ; together, Three thousand four hundred fifty six. Read the 4th Line of the Table downwards, *viz.* 123456789 ; here the Valuation of the Figures is from the Right-hand to the Left, as 1 in the ninth Place is Hundreds of Millions, but to be read from the Left-hand to the Right ; thus, One hundred twenty-three Millions, four hundred fifty-six Thousand, seven hundred eighty nine. But any Number may yet be read more intelligibly, *viz.* by Stops, thus ; make a Comma after every third Figure or Cypher, beginning at the Right-hand, and so on towards the Left, making a Stop after every third Figure or Cypher, as aforesaid ; thereby distinguishing every third Place into Hundreds, as Hundreds of Units, Hundreds

Hundreds of Thousands, Hundreds of Millions, and Hundred thousands of Millions, &c. and for Trial let's read the first Line of the Table; the last Place in Valuation is Hundred thousands of Millions, and to be pointed into Periods thus, 123,456,789,012; and read thus, One hundred twenty-three thousand, four hundred fifty-six Millions, seven hundred eighty-nine thousand, and twelve; that is, no hundreds, but twelve. Again, read the following Number, viz. 276,245,678,921,460; here the first Point or Period is betwixt 4 and 1, and the last between 2 and 6, and to be read thus; 276 Millions of Millions, 245 Thousands of Millions, 678 Millions, 921 Thousands, 460 Units or Ones. And thus may any Number be read with Ease, though a large one: And thus are large Numbers or Sums expressed, or set out, in the *Exchequer, Bank, and Lottery-Tinkers, &c.* as thus, N^o 224,156,—19,478—and 420,000, &c. The foregoing *Table of Numeration* is on the Right-hand distanced out into Periods, for the easier Reading thereof.

Numbers to be read or written.

96, *Ninety-six*
 242, *Two hundred forty-two*
 7924, *Seven thousand nine hundred 24*
 54006, *Fifty-four thousand and six*
 524707, *Five hundred twenty-four thousand 707*
 4606240, *Four Millions 606 thousand 240*
 62700472, *Sixty-two Millions 700 thousand 472*
 474960204, *Four hundred 74 Millions 960 thousand 204*
 4214007042, *Four thousand 214 Millions 7 thousand 42*
 470706420042, *Four hundred and 70 thousand 706 Millions 420 thousand and 42*

Of Numerical Letters.

Sometimes Numbers are expressed by Letters; especially in the *Bible*, to signify the Chapter or Psalm; at the Bottoms of Title Pages of Books for the Date of the Year, and frequently in Inscriptions on Funeral Monuments, &c. For which Reason 'tis necessary to know how to read them. Therefore observe, that I. stands for 1, or an Unit, II. for 2. III. for 3. IV. for 4. V. for 5. VI. for 6. VII. for 7. VIII. for 8. IX. for 9. X. for 10. XI. for 11. XII. for 12. XIII. for 13. XIV. for 14. XV. for 15. XVI. for 16. XVII.

XVII. for 17. XVIII. for 18. XIX. for 19. XX. for 20. XXI. for 21, &c. XXX. for 30. XXXI. for 31. &c. XL. for 40. XLV. for 45, &c. L. for 50. LI. for 51, &c. LX. for 60. LXI. for 61, &c. LXX. for 70. LXXI. for 71, &c. LXXX. for 80. LXXXI. for 81, &c. XC. for 90. XCI. for 91, &c. C. for 100. CC. for 200. CCC. for 300. CCCC. for 400. D. or ID. for 500. DC. for 600, &c. M. or CID. for 1000, &c. Thus the present Year 1755, is wrote MDCCLV.

A D D I T I O N

IS the putting together two or more Numbers or Sums, in order to make them one Total, or whole Sum.

Here we must always observe to set the Numbers to be added, orderly one under the other; that is, Units under Units, Tens under Tens, Hundreds under Hundreds, &c. as in the subsequent Examples.

Addition of Numbers of one Denomination.

<i>Yards</i>	<i>Gallons</i>	<i>Pounds</i>
Tens Units	Hund. Tens Units	X of Th. Thou. Hund. Tens. Units
2 4	7 5 6	5 7 9 6 2
4 2	4 3 2	3 9 7 4 4
6 8	5 7 8	6 7 2 2 2
8 6	6 9 6	7 9 6 7 4
2 4	4 2 2	. 2 4 9 2
4 2	6 7 8	. . 3 9 0
2 8 6	3 5 6 2	2 4 7 4 8 4

In Addition of simple Numbers, whether it be *Yards*, *Gallons*, *Pounds*, or any Thing else, remember to carry 1 for every 10 you find in the Row or Rank of Figures being Units, to the next Row of Tens; and the like from the Rank of Tens to the Row of Hundreds, &c. and whatever it makes in the last, you must set it down, amount to what it will. Thus:

The Numbers above are set down in Order, as before directed; that is, Units under Units, Tens under Tens, &c. as may be plainly understood, by being indicated at the

G

Head

Head of each Row or Rank with Units, Tens, Hundreds, &c. Then in casting up each Example, to know its Total, I begin at the Right-hand, or Units Rank, of the first Example, and say 2 and 4 is 6, and 2 is 8, and 8 is 16, and 6 is 22, and 4 is 26; in which Row there are two Tens and 6 over; wherefore I set down 6 just under its own Rank, and carry 2 to the next or last Row, and say; 2 that I carry and 4 makes 6, and 2 is 8, and 8 is 16, and 6 is 22, and 4 is 26, and 2 is 28; and it being the last Row, I set down the Amount, *viz.* 28; so that the Total Number of *Yards* is found to be (by this Method) at the Bottom 286. And the next, or second Example, is found by the same Method to be 3562 *Gallons*. And in the third and last Example, the Total Number of Pounds is found to be 247484. And so the Total of any other Example of the same Kind, *viz.* simple Numbers of one Denomination, may be found. *Note*, That when any of the Ranks amount to just 10, 20, 30, 40, 50, &c. then you must set down the 0, under its proper Rank, and carry either 1, 2, 3, 4, or 5, according to the Number of Tens that you find, to the next Row; and so you must always do, when it so happens, whether in the first, second, or third Row, or in any other, except the last, where what it amounts to must be set down without any Reserve or Carriage in the Mind, because there is no other Row or Rank to carry to, as was hinted before.

Addition of mix'd Numbers.

Note, 4 Farthings make 1 Penny, 12 Pence make 1 Shilling, 20 Shillings make 1 Pound Sterling.

Libra in *Latin* signifying a Pound, *l.* therefore stands for Pounds.

Solidus in *Latin* signifying a Shilling, *s.* therefore stands for Shillings.

Denarius in *Latin* signifying a Penny, *d.* therefore stands for Pence.

Quadrans in *Latin* signifying a Farthing, *q.* therefore stands for Farthings.

Observe, that Pounds be set directly under Pounds, Shillings under Shillings, Pence under Pence, and Farthings under Farthings.

But before you proceed, get this TABLE of Pence by Heart, thus, 30*d.* is Half a Crown, then 60*d.* is 5*s.* again

40*d.*

40*d.* is
then 1
comes
Hundr

The
reckon
pence,
Crown

Note
reckon
Table

As
tells yo
An
the Ya
In th
And

If o
penny,
formed

200 Six
80 Six-
200 Pe
80 Pen
200 Ha
80 Hal

The YOUNG MAN's Companion. 123

40d. is 3s. 4d. then 80d. is 6s. 8d. again, 50d. is 4s. 2d. then 100d. is 8s. 4d. &c. 100lb. of Cheese at 3d. the lb. comes to three Times 8s. 4d. or 100 of Faggots, 120 to the Hundred, at 1d. a-piece, comes to 10s. as in the Table.

d.	s.	d.	s.	l.	s.
20 is	1	8	30 is	1	10
30 —	2	6	40 —	2	—
40 —	3	4	50 —	2	10
50 —	4	2	60 —	3	—
60 —	5	—	70 —	3	10
70 —	5	10	80 —	4	—
80 —	6	8	90 —	4	10
90 —	7	6	100 —	5	—
100 —	8	4	110 —	5	10
110 —	9	2	120 —	6	—
120 —	10	—	130 —	6	10

Then for every Crown that a Hundred of Faggots cost, reckon an Half-penny; if the Faggot costs me three Half-pence, one Hundred will cost 15s. because there is three Crowns in it.

Note, That Boys may improve themselves very much in reckoning up divers Things, after they have by Heart the Table aforesaid, and learned this Rule of Addition.

As 100 Yards of Tape at one Penny the Yard, the Table tells you it comes to 8s. 4d.

An Hundred Yards of Galloom, at one Penny Half-penny the Yard.

In the Table 100d. is — 8s. 4d.
And Half that Sum is — 4s. 2d.
Answer 12s. 6d.

If one Pound of any Thing costs 7d. $\frac{1}{2}$, that is 7d. Half-penny, what will 280lb. Weight cost after that Rate; Performed by Addition thus,

	l.	s.	d.
200 Six-pences make 100s. or	—	5	—
80 Six-pences makes	—	2	—
200 Pence	—	—	16 8
80 Pence is a Noble, or	—	—	6 8
200 Half-Pennies is 100 Pence, or	—	—	8 4
80 Half-Pennies make 10 Groats, or	—	—	3 4
Price of the Goods	8	15	—

Note, Now you have by heart the Table of Pence, you may cast up any Sum of Money without dotting, for when you know the Number of Pence, you may, by this Table, know how many Shillings to carry to the Shillings Place. And for the Number of Shillings in the Row of Shillings, you know that 70 Shillings is 3*l.* 10*s.*

(10) (20) (12) 12 set over the Pence, shews that for
l. *s.* *d.* every 12 I find in the Pence Row, I am to
 17 16. 1 carry 1 to the Shillings; for so many 20*s.* as
 20 11. 7. I find in the Shillings Row, 1 to the Place
 23 18. 9. of Pounds, as aforesaid.
 73 17 10 But the easiest Way of casting up this
 Sum (for the young Learner) is by using
 136 4 3 Dots, thus:

Beginning at the Pence; I say 10*d.* and 9*d.* is 19*d.* where against the 9 I set a Dot for 12*d.* (or you may make your Dots on Waste Paper) and what is more or above 12 I carry to the next Figure, *viz.* 7, and it makes 14, where I set a Dot also for 12, and carry the remaining 2 to the 1 on the Top, makes 3, which 3*d.* I set between the Lines, as you see in the Example.

Next, I look how many Dots there are, and find 2, which I carry to the Row of Shillings, saying, 2 that I carry and 17*s.* is 19, and 18 is 37, where against the 18 I set a Dot for 20*s.* or 1*l.* and carry the odd 17*s.* upwards, saying 17 I carry and 11 is 28, where I set a Dot against the 11 for another 20*s.* and carry the remaining 8 to the 16 on the Top, saying, 8 I carry and 16 makes 24*s.* where I set down a Dot for 20*s.* and set between the Lines the remaining 4 under the Row of Shillings.

Note, That you may sum up the Shillings Row without dotting, thus; saying, 2*s.* I carry from the Place of Pence and 7 is 9, and 8 is 17, and 1 is 18, and 6 is 24, and 10 is 34, and 10 is 44, and 10 is 54, and 10 is 64, that is 3*l.* 4*s.* then the 4*s.* being set between the Lines, the 3*l.* is to be carried to the Pounds.

Lastly, The 3 Dots for the 3*l.* found in the Place of Shillings, I carry to the Pounds, saying, 3 that I carry and 3 is 6, and 3 is 9, and 7 on the Top makes 16, the remaining 6 I set between the Lines, under the first Row of the Pounds, and I carry 1 to the last Row, saying, 1 that I carry, and 7 is 8, and 2 is 10, and 2 is 12, and 1 is 13, which

which being set between the Lines, the whole Sum comes to 136*l.* 4*s.* 3*d.*

Note, That when you are to write a Bill of several small Parcels, begin it in Order of Pounds, Shillings, and Pence, 0 : 3 : 9, and when you are to set down 16*d.* set down 1*s.* 4*d.* or to set down 23*s.* you must set 1*l.* 3*s.* 0*d.*

If a Man owes me the three following Sums of Money, what come they to in the Whole ?

<i>l.</i>	<i>s.</i>	<i>d.</i>	<i>Note,</i> That the 7 <i>d.</i> $\frac{1}{2}$ is seven Pence
202.	17.	7 $\frac{1}{2}$	Half Penny ; and 1 <i>d.</i> $\frac{1}{4}$ is one Penny
703	1	9	Farthing ; and in the Total Sum between
906	10	1 $\frac{1}{4}$	the Lines 5 <i>d.</i> $\frac{3}{4}$ is Five Pence three Far-
1812	9	5 $\frac{3}{4}$	things.

To cast up the three Sums I do thus ; the $\frac{1}{4}$ *g.* which is the Farthing, and the $\frac{1}{2}$ the Half-penny ; make $\frac{3}{4}$, or three Farthings, which is set between the Lines ; next 1*d.* and 9*d.* is 10*d.* and 7*d.* is 17*d.* where against the 7 is set a Dot for 12*d.* and set the odd 5*d.* between the Lines.

Next, 1 that I carry from the Place of Pence, and 10*s.* is 11, and 1 is 12, and 17*s.* is 29*s.* I set down the remaining 9*s.* between the Lines, and the 20*s.* making 1*l.* I carry to the Place of Pounds ;

Saying, 1 I carry, and 6 is 7, and 3 is 10, and 2 is 12, where I set a Dot for 10, and set the remaining 2 between the Lines.

Next, I carry the Dot for 10, as 1, to the middle Row, (being all Cyphers) it is but 1 still, so I set the 1 under the Row of Cyphers, and proceed to the last Row ;

Saying, 9 and 7 is 16, and 2 at the Top is 18, which I set between the Lines, and the whole Sum comes to 1812*s.* 9*s.* 5*d.* $\frac{3}{4}$.

(1)

Due to

	<i>l.</i>	<i>s.</i>	<i>d.</i>
{ Mr. <i>Armstrong</i>	4	12	6
{ Mr. <i>Benson</i>	7	6	9
{ Mr. <i>Cox</i>	4	12	—
{ Mr. <i>Daniel</i>	6	17	7
{ Mr. <i>Eaton</i>	5	6	6
{ Mr. <i>Fletcher</i>	4	12	3
{ Mr. <i>Gray</i>	6	—	—
{ Mr. <i>Fellows</i>	5	15	4
	45	02	11

I begin and say, 4 and 3 is 7, and 6 is 13, and 7 is 20, and

G 3

and 9 is 29, and 6 makes 35*d.* now 30*d.* according to the Table, is 2*s.* 6*d.* and 5*d.* makes 2*s.* 11*d.* I set down 11 exactly under the Rank of Pence, and say, 2*s.* that I carry (which I do to the Rank of Shillings) and 5 is 7, and 2 is 9, (for I only take the Unit Rank of Shillings) and 6 is 15, and 7 makes 22, and 2 is 24, and 6 is 30, and 2 makes 32; and now being come to the Top of the Sum, and it making 32, I come down with the Tens of Shillings, Saying, 32 and 10 is 42, and 10 is 52, and 10 is 62, and 10 is 72, and 10 makes 82*s.* and the Table telling me that 80*s.* is 4*l.* I know therefore 82*s.* is 4*l.* 2*s.* wherefore I set down the remaining 2*s.* just under the Row of Shillings, and carry 4*l.* to the Pounds; saying, 4 that I carry, and 5 is 9, and 6 is 15, and 4 is 19, and 5 is 24, and 6 is 30, and 4 is 34, and 7 is 41, and 4 makes 45*l.* so that the Total of those several Sums of Money due to those several Persons, amounts to 45*l.* 2*s.* 11*d.* as in the Example.

(2)

		<i>l.</i>	<i>s.</i>	<i>d.</i>
Bought	<i>Tobacco</i>	46	10	9
	<i>Sugar</i>	79	16	—
	<i>Indigo</i>	42	18	3
Rec. for	<i>Broad-Cloth</i>	66	12	4
	<i>Canary</i>	90	16	—
	<i>Port-Wine</i>	84	17	6
	<i>Rice</i>	24	12	—
	<i>Log-wood</i>	60	10	—
		496	12	10

In the second Example of Money received, I begin at the Right hand, and say, 6 and 4 is 10, and 3 is 13, and 9 makes 22, and 22*d.* being 1*s.* 10*d.* I set down 10, and carry 1*s.* to the Shillings; saying, 1 that I carry and 2 is 3, and 7 is 10, and 6 is 16, and 2 is 18, and 8 is 26, and 6 makes 32; then I come down with the Tens, saying, 32 and 10 makes 42, &c. and I find at the Bottom it comes to 112*s.* which making 5*l.* 12*s.* I set down 12*s.* and carry 5*l.* to the Pounds, saying, 5 that I carry and 4 is 9, &c. I find that at the Top it amounts to 36, wherefore I set down 6 exactly under its own Rank, viz. the Rank of Units of Pounds, and carry 3 for the Tens that are in 30, (for at all Times in the first Denomination of Addition, whether of Money, Weight, or Measure; that is, in the Deno-

The YOUNG MAN's Companion. 127

Denomination of Pounds, Tuns, or Yards, you must cast them up as Sums of one Denomination; that is, for every Ten carrying one to the next, &c.) saying, 3 that I carry, and 6 is 9, and 2 is 11, and 8 is 19, &c. and find that at the Top it comes to 49; wherefore I set down 49 before the 6; and the Total amounts to 496l. 12s. 10d.

More Examples for Practice.

10	20	12	4	10	20	12	4	10	20	12	4
l.	s.	d.		l.	s.	d.		l.	s.	d.	
17	12	6	$\frac{1}{4}$	146	12	3	$\frac{1}{2}$	4	10	6	
20	10	2		278	10	9		—	7	9	
50	—	—		46	16	6		1	—	—	
44	12	8	$\frac{1}{2}$	100	—	—		1	1	—	
60	14	—		72	10	4		—	4	6	
29	16	6	$\frac{3}{4}$	69	16	6	$\frac{3}{4}$	—	10	—	
16	10	—		460	2	6		4	14	4	
20	—	—		49	10	—		—	7	6	
27	11	4	$\frac{1}{2}$	17	4	—		—	1	6	
17	4	—		22	10	—		—	2	6	
20	10	3		164	12	9		3	10	9	
46	16	8		75	10	4		1	10	—	
Total	371	18	3—	1503	16	—	$\frac{1}{4}$	18	—	4	

Addition of Avoirdupois Weight.

By this Weight are weighed all Kind of Grocery Goods or Wares, or Goods subject to Waste; as Tobacco, Sugar, Fruit and Drugs; as also Butter, Cheese, Allum, Tallow, Flesh, Iron, Brass, Copper, Lead, Tin, or Pewter; Pitch, Tar, Rosin, Hemp, Flax, Soap, Salt, and all Kind of garbled Goods; that is, those Goods that have Dust, Dross, or Waste.

A Table of this Weight is as follows, viz.

16 Drams is 1 Ounce, mark'd	_____	dr. Drams
16 Ounces 1 Pound	_____	oz. Ounces
28 Pounds 1 Quarter of a Hundred	}	lb. Pounds
Weight, or 112 Pounds		qr. Quarters
4 Quarters 1 Hundred Weight	_____	C. Hundreds
20 Hundred Weight 1 Ton	_____	T. Tun

G 4

Small

Small Weight.

			Small Weight.					
C.	q.	lb.	10	4	28	16	28	16
5	1	16	24	1	12	4	9	1
4	2	24	42	2	—	11	4	3
6	3	6	16	1	12	12	7	1
7	—	12	25	3	24	13	5	3
9	1	20	19	—	20	10	4	3
6	2	—	26	1	22	14	2	2
39	3	22	154	3	10	—	34	3
							45	1
								3

In the first of these Examples, I begin at the Right-hand, to wit, at the Denomination of Pounds, and stop at every 28, so many Pounds making a Quarter; that is, at every 28 I make a Dot, and I find two 28's and 22lb. over; wherefore I set down 22, and carry 2qrs. to the Quarters, and adding them up find them 11, which is 2C. and 3qrs. over; wherefore I set down 3, and carry 2 to the Hundreds; which also added up, make 39, so that the Total Weight is 39C. 3qrs. 22lb. &c.

Because Grocers send for small Parcels weekly by the Carrier, they commonly write the Bills of Carriage thus,

	C.	q.	lb.	l.	s.	d.
A Parcel down	5	3	14	0	3	7
Boxes up to London	0	1	19	0	1	1

Note, That the first Line shews that the Parcel that came down by the Carrier, weigh'd 5C. 3qrs. 14lb. and the Carriage came to 3s. 7d. &c.

Note, that in Weighing at the Water-side, or elsewhere, they do not weigh by the Tun in great Weight, tho' some Goods are sold by it, as Iron, Logwood, Cheese, &c. but by Hundreds, Quarters, and Pounds, which are afterwards computed by Tuns, &c.

Addition of Troy Weight.

This Weight is subdivided in common thus,

24 Grains is a Penny-weight, mark'd	gr.
20 Penny-weights is an Ounce,	— oz.
12 Ounces is a Pound,	— lb.

By this Weight, Silver, Gold, Liquors, Amber, and Jewels, are weighed, and till of late Years Bread and Flour.

Note,

Note, That a Grain of Corn is supposed to be the Origin of the least Subdivision herein mentioned; and formerly a Silver Penny weighed the 20th Part of an Ounce,, from whence it took it's Name.

Note also, That 25lb. is a Quarter of a Hundred of this Weight, 100lb. is a Hundred Weight, and 20 Hundred 1 Ton of Gold or Silver.

Examples of Troy Weight:

6 Ingots of Silver Wt. viz.					10	12	20	24
lb. oz. pw. gr.					lb.	oz.	pw.	gr.
N ^o 1	Wt.	4	5	12	10	14	6	10
2		5	4	16	24	10	11	12
3		3	11	19	21	6	7	10
4		4	6	7	22	10	12	14
5		5	1	11	16	11	12	13
6		4	11	12	21	7	6	17
		28	6	—	122	5	1	15

In the Denomination of Grains I stop at 24, and find it to amount to 3 Penny-weights, and 12 Grains over; wherefore I set down 12 Grains, and carry 3 Penny-weights to the Penny-weights; then I say, 3 that I carry, and 2 is 5, and 1 is 6, and 7 is 13, and 9 is 22, and 6 is 28, and 2 is 30; and then coming down with the Tens, I say, 30 and 10 is 40, and 10 is 50, &c. (just as I do in *Addition of Money*; for as there 20s. make a Pound, so here 20 Penny-weights make an Ounce) and find it come just to 80; now in 80 there are just 4 Twenties, or 4 Ounces; wherefore I set down—, and carry 4 to the Ounces, and find them to amount to 42, which makes 3 Pounds, and 6 Ounces over; wherefore I set down 6, and carry 3 to the Pounds; saying, 3 I carry and 4 is 7; and 5 is 12, &c. and find they come to 28; so the Total is 28lb. 6 oz.—pw. 12gr. and so of the rest.

Apothecaries Weight and Marks.

This is the same with Troy Weight, but only differently subdivided, as here under.

12	8	3	20	<i>Note</i> , 20 Grains make a Scruple				Θ
lb	3	3	Θ	gr.				
98	11	7	2	3 Scruples 1 Dram				3
45	10	6	1	8 Drams 1 Ounce				3
62	9	4	2	12 Ounces 1 Pound				lb
207	—	3	1	9				

G 5

This

130 *The YOUNG MAN's Companion.*

This cast up as the other, by dotting each Row, according to the Figures on the Top of the Sum.

℥ stands for, Take thou; *ana*, of each Medicine a like Quantity; *M.* an Handful; *℥ S.* a sufficient Quantity.

Note, That the Apothecaries sell their Goods by Avoirdupois Weight, but compound their Medicines by this of Troy Weight, 20 Grains of which make a Scruple, &c. as before.

Measures in Length.

	Dozens	Yards	Quarters	Nails	
	12	4	4		
	756	8	2	2	
	342	9	3	1	
	753	6	2	2	
	1853	1	—	1	
	3	8	11	20	3
Leagues	Miles	Furlongs	Scores	Yards	Feet
763	2	4	6	17	2
597	1	6	5	14	1
753	—	7	6	13	2
2114	2	2	8	5	2

Land Measure.

Acres	Roods	Poles
4	40	
542	2	12
761	1	13
582	1	19
1886	1	4

Dry Measure.

Lafts	Quarters	Bushels	Pecks
4	8	4	
464	3	4	2
765	4	3	3
452	8	6	1
1685	—	6	2

Coal Measure.

Chaldrons	Quarters	Bushels	Pecks
4	8	4	
27	3	4	1
72	2	7	3
19	1	6	2
120	—	2	2

This for Coals at 36 Bushels the Chaldron. Scotch Coal is sold by the Hundred Weight.

Liquid

Liquid Measure for Wine.

Tuns	² Butts	² Hogsheads	⁶³ Gallons	⁴ Quarts	² Pints
84	1	1	61	2	—
55	—	—	60	1	1
92	1	1	62	3	1
240	—	—	58	3	—

Ale Measure.

Hogsheads	² Barrels	² Kilderkins	² Firkins	⁸ Gallons
7	1	—	1	5
6	1	1	1	7
9	—	1	—	6
24	—	—	—	2

Beer Measure.

2	2	2	9
9	1	1	8
2	—	1	7
5	1	—	6
18	—	—	3

Note, That 8 Gallons is a Firkin of Ale or Soap, 9 Gallons is a Firkin of Beer, $18\frac{1}{2}$ Gallons a Runlet of Wine, 56lb. a Firkin of Butter, 42 Gallons a Tierce, 63 Gallons a Hogshead, 2 Hogsheads a Pipe or Butt, 2 Pipes or Butts a Tun of Wine, being 252 Gallons. A Load of Wheat 5 Bushels, a

Comb 4, a Weigh 5 Quarters, 2 Weighs a Last.

Four Pecks are a Bushel of Land-Measure, 5 Pecks are a Bushel of Water-Measure. *Note,* That every Bushel with a plain, even Bottom, should be made $18\frac{1}{2}$ Inches wide throughout, and 8 Inches deep. A Chaldron of Coals 36 Bushels. A Stone is 8lb. and in some Countries 'tis 14lb. A Barrel of Soap is 256lb. Half a Barrel 128lb. and a Firkin 64lb. A Weigh of Cheese two Hundred and an Half, or 280lb. A Quire of Paper 24 Sheets, a Ream of Paper 20 Quires, a Bale of Paper 10 Reams.

Addition of Time.

Years	¹² Months	⁴ Weeks	⁷ Days	²⁴ Hours	⁶⁰ Min.
673	7	3	3	18	27
542	9	2	6	17	38
1216	5	2	3	12	5

Note, That 60 Minutes are an Hour, 24 Hours a Day and Night, &c.

Proof

Proof of Addition.

After you have cast up the Sum, and set down the Total on Waste Paper, begin at the Top, and cast it downwards, and if this Sum agrees with the former Total, it is right, otherwise not. This I have often proved to be the best and quickest Way.

SUBSTRACTION.

SUBSTRACTION taketh a lesser Number out of a greater, and leaveth the Difference.

Always set the biggest Number uppermost, and with the same Care and Order as in Addition, set the lesser Number under it, so that Units stand under Units, Tens under Tens. Whatever you used to stop at in Addition, whether at one Denomination, or at several, of that same Number must you borrow in Substraction, when Need requires; remembering to pay or carry 1 to the next Place on the Left-hand.

If you have 847 Sheep in a Field, and are to take out 533 of them to carry to a Fair or Market, how many will there be left in the Field?

Sheep in the Field,	847
Sheep to be taken out,	533

Now to substract 533 out of 847, begin on the Right-hand, thus:

Take 3 out of 7, rests 4, to be put under the Line; next 3 out of 4 rests 1; *lastly*, take 5 from 8 rests 3, to be put under the Line; so that there remains in the Field 314 Sheep, which you may prove, by adding 314 to 533, and the Sum will be 847.

Sheep in the Field,	847
Sheep to be taken out,	<u>533</u>
Remains in the Field,	<u>314</u>
Proof	<u>847</u>

If King Henry VIII. was born in the Year of our Lord 1491, how many Years is it since?

The present Year of our Lord	1755
The Year of K. Henry's Birth	<u>1491</u>
Years since	264

This

The YOUNG MAN's Companion. 133

This you may substract as the last Question, or thus :
 Take 1 from 5, rests 4 to set between the Lines; next take
 9 from 5 I cannot, so I borrow 10, and say, 9 from 15,
 rests 6 to set between the Lines; next, 1 that I borrow and
 4 is 5, take 5 from 7, rests 2; so that it is 264 Years since
 King Henry VIII. was born.

By this Rule you may know how long it is since any
 Thing worthy of Note hath happened.

The Anabaptists began to appear in the Year of our Lord,
 1521, *in Saxony, by Nicholas Storke and Thomas Munster,*
as Luther and Melancton affirm.

The present Year	1755
The Year they began in	1521

Years since 234

The Brownists in 1595, by Robbrt Brown, Barrow, and
Greenwood; ——— Presbyterians in 1554, by Calvin and
Beza in Geneva: But in England by Faithful Comin, a Do-
minican Fryer, who passed under the Notion of a zealous Pu-
ritan, in the Year 1567, and by Thomas Heath, a Jesuit, in
the Year 1568.

Independents began a little before the Year 1640, by Good-
win and Nye, and Sympson and Burrows, alias Brows.

The present Year	1755
The Year they began in	1640

Years since 115

The Antinomians began in 1645, by Crisp, Saltmarsh, Trash,
Goad, and Eaton.

The present Year	1755
The Year they began in	1645

Years since 110

Quakerism in the Year 1655, by George Fox, William
Dewsbury, and James Nailer.

The present Year	1755
The Year they began in	1655

Years since 100

Thus

134 *The YOUNG MAN's Companion.*

Thus any Distance of Time, that is from any particular Date of a Year, may be known, by subtracting that Date from the present Date of the Year; for a further Proof of which, take the following Examples.

The present Year	1755
The Fire of London	1666

Years since	89
-------------	----

The present Year	1755
Gunpowder Treason	1605

Years since	150
-------------	-----

If 5643 l. be owing to a Merchant, and the Debtor pays thereof at one Time 4754 l. how much of the said Sum of 5643 l. remains unpaid?

Take Pen and Paper, and	5643
set the two Sums thus,	4754
	889

Beginning on the Right-hand (as before) I say, take 4 out of 3 I cannot, therefore I borrow 10, and add it to the 3, and it makes 13; then I say, take the said 4 from the 13, 9 rests, which 9 I see under the Line.

Next, because I borrow 10 to add to the Figure 3, yet I call that 10 but 1, saying 1 that I borrowed and 5 make 6, take 6 from 4 above it I cannot, therefore (as before) I borrow 10 again, and add it to the 4, makes 14, then I say, take 6 from 14, rests 8 to set under the Line.

Next, take 1 that I borrowed at 5, and the 7 makes 8, take 8 from 6 above it, I cannot, therefore I borrow 10, and add it to the 6, makes 16, then I say, take 8 from 16, rests 8 to be set under the Line.

Lastly, Because I borrowed 10 to add to 6, I pay it again at the 4, saying 1 that I borrowed and 4 makes 5, take 5 from the 5 above, rests 0, to be set below the Line, which 0 doth not add to the Number at all, but fills up a Place.

So that 4754 l. being paid of the Sum 5643 l. there remains yet unpaid just 889 l. as you see above.

EXAMPLE. Suppose Mr. Ayres owes Mr. Boyden 323 Pounds, whereof Mr. Ayres hath paid Mr. Boyden the Sum of 146 Pounds in Part; what remains due?

Owing

Owing	323
Paid	146
Refts due	<u>177</u>

Here the lesser Number 146 stands under the greater 323 ; and to find the Remainder, or Sum resting due, I say, 6 from 3 I cannot, but 6 from 13, (for you must always borrow 10 of the next Figure in the same upper Line, and put it to the Figure or Cypher that is directly over the Figure you subtract) and there remains 7 ; then 1 that I borrow and 4 is 5, (for as I borrowed 10 or 1 out of 2, so I must pay the said 1 or 10 to the Figure again, as above hinted :) I say, 5 from 2 I cannot, but 5 from 12, (borrowing 10 and putting it to the Figure that stands immediately under it, which here is 4, as above directed) and there remains 7 ; then 1 that I borrowed and 1 is 2, from 3 the upper Figure, and there rests 1, and so the Example is done ; and by it is shewn, That *A.* still owes *B.* 177 Pounds, as appears in the Work ; and for the Proof of its Verity add 177 the Remainder to 146, the lesser of the two given Numbers, and it will make 323, being the same with the greater Number, or Sum of Money first due ; and therefore, a sure Proof of the Truth and Certainty of the Rule. And as *Subtraction* is proved by *Addition*, so may *Addition* be proved by *Subtraction* : For if the two aforesaid Numbers, viz. 323 and 146, are added, their Total is 469 ; from which, if you deduct 146, the Remainder will be the greater Number ; or if you subtract 323 from the said 469, the Remainder will be 146, the lesser Number.

All Examples or Sums in *Subtraction*, of one Denomination, are performed as above, without any Variation.

More Examples for Practice.

	lb.	Yards	Gallons	Pounds
From	4796	3700	47200	479672
Take	<u>2929</u>	<u>1976</u>	<u>31976</u>	<u>97694</u>
Remains	1867	1724	15224	381978
Proof	<u>4796</u>	<u>3700</u>	<u>47200</u>	<u>479672</u>

Suppose 5643l. be owing to a Merchant, whereof the Debtor has paid 4754l. 12s. 8d. how much is unpaid ?

Note,

136 The YOUNG MAN's Companion.

Note, That because the Money paid is odd, that is, hath Shillings and Pence, besides Pounds, set Cyphers in the Place of Shillings and Pence, and the Sum will stand thus.

To subtract the Sum I do thus :

	10	20	12
	<i>l.</i>	<i>s.</i>	<i>d.</i>
Lent	5643	—	—
Paid	4754	12	8
Unpaid	888	7	4

Saying, take 8 from 0, that I cannot do, but I borrow 12 at Top, and say, take 8*d.* from 12*d.*, rests 4*d.* to set under the Line.

Next, the 12 I borrowed at the Pence, I pay as 1 at the Shillings, saying, 1 that I borrowed, and 12*s.*

make 13, take 13 from 0 I cannot, therefore I borrow 20, and say, take 13 from 20, rests 7*s.*

Next, 1 that I borrowed at Shillings, and 4 of the Pounds make 5, take 5 from 3 I cannot, therefore I borrow 10, and add it to the 3, it makes 13; then take 5 from 13, and rests 8, to be set under the Line, as above, finishing as the last Example, and there remains unpaid 888*l.* 7*s.* 4*d.* For Proof, add the Sum paid and that unpaid together, and if it make the Sum lent, it is right, otherwise not.

*If a Man owed to another 130*l.* 2*s.* 8*d.* and hath paid of it 36*l.* 12*s.* 9*d.* what remains?*

	10	20	12
	<i>l.</i>	<i>s.</i>	<i>d.</i>
Set the Sum thus			
Lent	130	02	08
Paid	36	12	09
Unpaid	93	09	11

Again, be very exact in setting the Figures under each other even; and that the Cypher 0 is on the Place of Hundreds, next the 36*l.* which fills up the Place even with the 100*l.* as the Cyphers by the 2*s.* 8*d.* and the 9*d.* above the Cypher next the Left-hand make a Number never the bigger, yet a Cypher in the Middle of any Number is of Service; and those next the Right-hand in any Number in vulgar Arithmetick; for the Number 2030 is read two Thousand and Thirty, because there is a Cypher in the Place of Hundreds, and a Cypher in the Place of Units, or Ones, which you may perceive by this following Example.

The

The present Year of our Lord is 1755

The last Number above is 2030

Now most Boys will readily read those four Figures 1755, the Date of the Year, but many will mistake in the other.

The Figure 1 being one Thousand, then the Figure 2 under it must needs be 2 Thousands, then the 7 over the 0 is seven hundred, next the Figure 5 being Fifty, the 3 under that must be Thirty, &c.

Now for the true Subtraction of the last Example.

First, I say, take 9 d. from 8 d. above it, that I cannot do, therefore I borrow the 12 at Top, and add it to the 8 d. makes 20 d. then I say take 9 d. from 20 d. rests 11 d. which I set between the Lines.

Next, because I borrowed the 12 at Top at the Pence Place, I carry it as 1 to the Place of Shillings, saying, 1 that I borrow, and 12 s. make 13 s. take 13 s. from the 2 s. I cannot, therefore I borrow the 20 at Top, and add it to the 2 makes 22, then take the 13 s. from 22 s. rests 9 s. which I set between the Lines.

Next, the 20 s. or 1 l. that I borrowed at the Shillings, I carry to the Place of Pounds, saying, 1 that I borrowed and 6 is 7, take 7 from 0 I cannot, therefore I borrow the 10 at Top, and say, take 7 from 10, rests 3, to be set between the Lines.

Next, 1 that I borrowed and 3 makes 4, take 4 from 3 I cannot, therefore I borrow the 10 as I did before, and say, take 4 from 13, rests 9, which 9 I set between the Lines.

Lastly, 1 that I borrowed in the Middle of the Pounds, I carry to the 0 next the Left-hand, and say, 1 that I carry and 0 is 1, therefore I take that 1 from the 1 above, rests 0, to be set between the Lines.

So that there is unpaid 93 l. 9 s. 11 d. of the 130 l. 2 s. 8 d. which you may prove by adding the Sum paid and that unpaid together.

Subtraction of diverse Denominations.

Of Money.

Suppose Mr. Cotton owes Mr. Dutton 9 l. 2 s. 6 d. and Mr. C. hath paid Mr. D. in Part 6 l. 16 s. 4 d. what remains due to Mr. D? Answer, due to Mr. D. 2 l. 6 s. 2 d. as by this Example.

Due

$l. \quad s. \quad d.$ Take $4d.$ from $6d.$ and there re-
 Due $9 \quad 02 \quad 6$ mains $2d.$ then $16s.$ from $2s.$ I cannot,
 Paid $6 \quad 16 \quad 4$ but borrow one Integer of the next
 Denomination, or one Pound, which is,
 Rests due $2 \quad 06 \quad 2$ $20s.$ I say 16 from 20 , and there rests
 4 , and take the over Number 2 , and
 putting it to the Remainder 4 , makes
 6 ; wherefore I put down 06 in the
 Place of Shillings, and say, 1 that I
 borrow and 6 is 7 ; now $7l.$ from $9l.$
 there remains $2l.$ so the Money resting
 due to Mr. Dutton is $2l. \quad 6s. \quad 2d.$ as in the
 Example.

	10	20	12	4	
	$l.$	$s.$	$d.$		
Sold for	242	16	03	$\frac{3}{4}$	
Paid in Part	174	12	06	$\frac{1}{2}$	
Answer	68	03	09	$\frac{1}{4}$	

Again, Mr. Evans sells
 to Mr. Forth, Spanish Wool
 to the Value of $242l. \quad 16s. \quad 3d. \quad \frac{3}{4}$; and pays present
 Money, and by a Note on
 Mr. Goodwin the Sum of
 $174l. \quad 12s. \quad 6d. \quad \frac{1}{2}$ what
 Money remains unpaid from Mr. Forth? Answer $68l. \quad 3s. \quad 9d. \quad \frac{1}{4}$.

Here I say, 2 Farthings (or a Half-penny) from 3 Far-
 things, and there remains 1 or $\frac{1}{4}$; which I set down in its
 proper Place, *viz.* under the Denomination of Farthings;
 then 6 from 3 I cannot, but 6 from 12 , (as marked over the
 Denomination) and there remains 6 , and $3d.$ over it makes
 $9d.$ which I place under the Line in its right Place, *viz.* of
 Pence; then 1 that I borrowed, (that is, 1 Shilling) and 12
 is 13 ; $13s.$ from $16s.$ and there rests 3 , which I likewise set
 down under its own Rank; then 4 from 2 I cannot, but 4
 from 12 (borrowing 10 , as in Addition I carry 1 for every
 10) and there rests 8 ; then 1 that I borrow and 7 makes 8 ;
 8 from 4 I cannot, but 8 from 14 , and there remains 6 ; so
 that the Sum remaining due is $68l. \quad 3s. \quad 9d. \quad \frac{1}{4}$, as in the Work.
 And for its Proof, you must add the Remainder, $68l. \quad 3s. \quad 9d. \quad \frac{1}{4}$,
 to the lesser, or under Sum, $174l. \quad 12s. \quad 6d. \quad \frac{1}{2}$,
 and it makes $242l. \quad 16s. \quad 3d. \quad \frac{3}{4}$, the Sum first due, which
 is a Proof of the Work's being right. See the Example.
 Or you may subtract the Sum that remains yet unpaid, *viz.*
 $68l. \quad 3s. \quad 9d. \quad \frac{1}{4}$, out of the whole Sum, *viz.* $242l. \quad 16s. \quad 3d. \quad \frac{3}{4}$
 and you will find the Difference or Remainder will be the
 Sum paid, *viz.* $174l. \quad 12s. \quad 6d. \quad \frac{1}{2}$.

More

More Examples for Practice.

	10	20	12	4
	<i>l.</i>	<i>s.</i>	<i>d.</i>	
Due	174	16	06	$\frac{1}{4}$
Paid	97	12	04	$\frac{3}{4}$

Remain	77	04	01	$\frac{1}{2}$
--------	----	----	----	---------------

Proof	174	16	06	$\frac{1}{4}$
-------	-----	----	----	---------------

	10	20	12
--	----	----	----

First due	74	00	00
-----------	----	----	----

Paid	46	12	10
------	----	----	----

Balance	27	07	02
---------	----	----	----

Proof	74	00	00
-------	----	----	----

	10	20	12	4
--	----	----	----	---

Due	2471	07	00	
-----	------	----	----	--

Paid	1976	16	06	$\frac{1}{2}$
------	------	----	----	---------------

Remain	494	10	05	$\frac{1}{2}$
--------	-----	----	----	---------------

Proof	2471	07	00	
-------	------	----	----	--

Sometimes a Sum owing may be paid at several Times; then the several Payments must be added together, and their Total deducted from the Sum first due, as in this and the Examples following.

	10	20	12
--	----	----	----

	<i>l.</i>	<i>s.</i>	<i>d.</i>
--	-----------	-----------	-----------

	74	10	04
--	----	----	----

	29	12	09
--	----	----	----

	44	17	07
--	----	----	----

	74	10	04
--	----	----	----

	10	20	12
--	----	----	----

	274	16	06
--	-----	----	----

	197	19	04
--	-----	----	----

	76	17	02
--	----	----	----

	274	16	06
--	-----	----	----

	10	20	12
--	----	----	----

Due	796	00	00
-----	-----	----	----

Paid	279	11	07
------	-----	----	----

Bal.	516	08	05
------	-----	----	----

Proof	796	00	00
-------	-----	----	----

Owing 266 *l.*

Paid at Times	20
	15
	30
	90
	17
	24
	60

Paid in all	256
-------------	-----

Refts due	10
-----------	----

Proof	266
-------	-----

Due

Due	<i>l. s. d.</i>	Received	<i>l. s. d.</i>
	249 12 0		100 10 0
Received at several Times	24 12 6 9 14 9 20 00 0 16 16 6 22 10 2 13 12 6 7 16 4	Paid to several Persons	6 16 0 10 00 0 5 12 6 20 10 0 7 09 5 9 08 6 7 12 6
Received in all	115 02 9	Paid in all	67 09 0
Rests due	134 09 3	Remains in the Bag	33 01 0
Proof	249 12 0		

Avoirdupoise Weight.

	10	20	4	28	10	4	28	10	16	16
	Tuns	C.	qr.	lb.	C.	qr.	lb.	lb.	oz.	dr.
From	44	12	1	10	246	2	12	146	02	10
Take	39	14	2	06	164	3	22	97	10	12
	4	17	3	04	81	2	18	48	07	14
	44	12	1	10	246	2	12	146	02	10

Troy Weight.

	10	12	20	24	10	20	24
	lb.	oz.	pw.	gr.	oz.	pw.	gr.
From	462	04	10	11	1247	10	12
Take	196	09	06	16	976	16	17
Remains	265	07	03	19	270	13	10
Proof	462	04	10	11	1247	10	12

And so much for Subtraction ; which Method will serve for any Denomination whatever, having Respect to the several Tables of Quantity, as before hinted in Addition.

M U L T I P L I C A T I O N.

MULTIPLICATION, for its quick Dispatch in Business, may be accounted the most serviceable Rule in Arithmetick ; it performeth the Work of many Additions in the most compendious Manner, brings Numbers of great Denominations into small, as Pounds into Shillings, Pence, or Farthings ; Tons into Hundreds, Quarters, Pounds, or Ounces, &c. and by knowing the Value of one Thing, we find the Value of many.

In

In Multiplication observe these three Terms, *Multiplicand*, *Multiplier*, *Product*.

1. The *Multiplicand* (generally the greater of the two Numbers) is the Number to be multiplied.
2. The *Multiplier* (generally the lesser of the two Numbers) is the Number to multiply with.
3. The *Product* is the Result of the Work, or the Answer to the Question. But before any Thing can be done to the Purpose, it is necessary to learn the following Table perfect by Heart.

Multiplication Table.

TO read this Table of Multiplication.
First, Begin at the Top, at the Figures 2 and 2, saying, 2 Times 2 is 4.

Secondly, Say 3 Times 3 is 9, 3 Times 4 is 12, &c. Next, 4 Times 4 is 16, &c.
Lastly, The last Line, 9 Times 9 is 81.

Times is		
2	2	4
	3	6
	4	8
	5	10
	6	12
	7	14
	8	16
	9	18
3	3	9
	4	12
	5	15
	6	18
	7	21
	8	24
	9	27
4	4	16
	5	20
	6	24
	7	28
	8	32
	9	36
5	5	25
	6	30
	7	35
	8	40
	9	45
6	6	36
	7	42
	8	48
	9	54
7	7	49
	8	56
	9	63
8	8	64
	9	72
9	9	81

2 is 24

3 — 36

4 — 48

5 — 60

6 — 72

12 Times 7 — 84

8 — 96

9 — 108

10 — 120

11 — 132

12 — 144

What is the Amount of 3 Times 654?

Answer, If you set the Number 654, 3 Times down on Paper, one over another, the Total will be 1962.

But such Questions are done by this Rule of Multiplication much readier for being set down thus :

654 *Multiplicand.*

3 *Multiplier.*

Now to know how much 3 Times 654 is, begin thus, saying, 3 Times 4 is 12, the Figure 2 of the 12, set below the Line, and bear the 10 of the 12 in Mind, as 1 ; next,

next, 3 Times 5 is 15, and the 1 bore in Mind, makes 16, so I set the 6 below the Line, and bear the 10 in Mind as 1; next, I say, 3 Times 6 is 18, and 1 bore in Mind makes 19, which I set down, and the Work will stand as in the Margin.

654
3
—
1962

How many is 3 Times 472? Set the Figures down as in the Margin; and then say, 3 Times 2 is 6, which place under the 2 in the Multiplicand; then 3 Times 7 is 21; set down 1 under 7, and carry 2, for two Tens, as in Addition of one Denomination; then 3 Times 4 is 12, and 2 is 14; which set down, and the Product is 1416, that is, 3 Times 472 makes so much; and may be proved by *Addition*, by setting down 472 three Times in Additional Order, and casting it up, which makes the Assertion good in the second Definition, that this Rule compendiously performs the Office of Addition. Likewise the foregoing Examples agree with the first Definition; for as 3 Times 472 makes 1416, so doth 472 Times 3 make the same, *viz.* 1416.

472
3
—
1416

Example. Again, how many makes 742 multiply'd by 4?

742 Multiplicand
4 Multiplier
—
2968 Product

} Here I say, 4 Times 2 is 8, and 4 Times 4 is 16; 6 and carry 1; and 4 Times 7 is 28, and 1 is 29, which set down; so the whole Product is 2968, as *per* Example.

More Examples of one Figure in the *Multiplier* are these, *viz.*

<i>Multiplicand</i>	7420	4444	7460	90704	56789
<i>Multiplier</i>	5	6	7	8	9
<i>Product</i>	37100	26664	52220	725632	511101

In Compound Multiplication.

When the *Multiplier* consists of more Figures than one, you must begin with that Figure which is in the Place of Units of the *Multiplier*, and go thro' the whole *Multiplicand*, by multiplying each Figure of it first by that said Unit Figure, then by the next, to wit, by the Figure in the Place of Tens of the *Multiplier*, then with the third, &c.

to

to the last ; always remembring to place the first Figure of every Product or Line, (for you will ever have as many as you have significant Figures in the *Multiplier*) I say, remember to place the first Figure of each Line exactly and perpendicularly under the Figure you multiply by ; and then add the several Lines or Products together, which so collected, gives the total Product required, as in the Examples following, *viz.*

Example.

How many is, or are, 23 Times 7426 ? First, 7426
begin with the Unit Figure 3 in the *Multiplier*, 23
saying, 3 Times 6 is 18 ; 8 (which I set directly
under 3, by which I multiply) and carry 1 ; 22278
then 3 Times 2 is 6, and 1 is 7 ; then 3 Times 4 14852
is 12 ; 2 and carry 1 ; then 3 Times 7 is 21, and 170798
1 is 22. And so I have done with the first Figure
of the *Multiplier*, *viz.* 3. Then I go to the next,
that is 2, and say twice 6 is 12 ; 2 and carry 1 ; (which 2 is
placed in a direct Line under 2 the multiplying Figure) then
twice 2 is 4, and 1 is 5 ; then twice 4 is 8 ; and lastly, twice
7 is 14, which I set down : Then I add the two Products
together, saying, 8 is 8, &c. and the Total is the right and
proper Product, or Result of the Multiplication, *viz.* 170798.

To know how many Hours there are in one Year.

There are 365 Days in a Year, and 24 Hours in a Day, therefore I multiply 365 by 24, and to do that I set them thus :

$$\begin{array}{r} 365 \\ 24 \\ \hline 1460 \\ 730 \\ \hline 8760 \text{ Hours in a Year.} \end{array}$$

Then I proceed to multiply, saying 4 Times 5 is 20, and set down the Cypher under 4, and carry the two Tens to the next Place, saying 4 Times 6 is 24, and 2 that I carry is 26, wherefore I set down the 6 under the Figure 6, and carry the two Tens to the next Place, saying 4 Times 3 is 12, and two that I carry is 14, which I set down.

Having

44 *The YOUNG MAN's Companion.*

Having multiply'd the 365 by the Figure 4, then I proceed to multiply it by the Figure 2 of the 24, the Multiplier, after the same Manner as I did the Figure 4;

Saying, 2 Times 5 is 10, set a Cypher under the 2, because I multiply by 2, and bear 1 in Mind. Next, 2 Times 6 is 12, and the 1 I bore in Mind is 13, and the 3 of the 13 I set under the 4, and bear 1 in Mind. Lastly, I say 2 Times 3 is 6, and 1 that I bore in Mind makes 7, which 7 I set under the 1; and now having done multiplying, to finish the Work, I add those two Numbers together, viz. the 1460 and 730, just as they stand; and they amount to 8760, as you may see by the Example.

If there be 8760 Hours in one Year, as in the last Example, the Question is, How many Minutes are in 8760 Hours?

Hours in one Year	8760
Minutes in one Hour	60

525600

Note, That you are to observe to set the 6 of the 60 just under the last Figure of the Multiplicand, next the Right-hand, and the Cypher 0 by itself; the same ought to be observed, if the Multiplier had been 600, or 6000, or 10, 100, or 1000, &c.

Now for the Resolving this Question, begin thus; the Cypher 0 I set under the Line. Next, 5 Times 0 is 0, which 0 I set under the Line under the 6; next, 6 Times 6 is 36, the odd 6 of the 36, I set under the Line, and bear three in Mind for the 30, saying, 6 Times 7 is 42, with the 3 I bore in Mind, make 45, the odd 5 I set between the Lines, and bear four Tens in Mind.

Lastly, 6 Times 8 is 48, with the 4 bore in Mind makes 52; and the odd 2 I set under the Line, and the 5 of the 52 (having no farther to carry it) I set it also under the Line, and the whole Sum is 525600, as above.

If there are 525600 Minutes in a Year, how many Minutes old may a young Man be, that is 23 Years of Age?

Set the Question down thus, 525600 Minutes in a Year,
23 Years old

Saying, 3 Times 0 is 0, and set that under the 3; next, 3

Times

Times 0 is 0, and set that under the 2; next, 3 Times 6 is 18, I set the odd 8 under the Line, and bear 1 in Mind; next, 3 Times 5 is 15, and the 1 I bore in Mind makes 16, the odd 6 I set under the Line, and bear 1 in Mind, and say 3 Times 2 is 6, and the 1 I bore in Mind makes 7, which I set under the Line. Next, I say 3 Times 5 is 15, which 15 I set under the Line, and the Figure 3 of the Multiplier is done with.

Next, multiply the Figure 2 of the Multiplier; saying, 2 Times 0 is 0 (which 0 I set just under the Figure 2, as you may see below.) Next, 2 Times 0 is 0, which 0 I set under the Figure of 8: Next, 2 Times 6 is 12, (the 2 of the 12 I set under the 6) and bear 1 in Mind. Next, 2 Times 5 is 10, and the 1 I bore in Mind, makes 11, the odd 1 I set under the 7, and bear 1 in Mind. Next, 2 Times 2 is 4, and the 1 I kept in Mind makes 5, to set under the 5; 2 Times 5 is 10, and set it down as you see underneath.

Minutes in the Year	—	—	525600
Years of his Age	—	—	23
			1576800
			1051200
Minutes old	—	—	12088800

Now I have done multiplying, and the two Lines that came thereof, being added together, make 12088800; so that a young Man of the Age of 23 Years may be said to be twelve Millions, 88 Thousand, 8 Hundred Minutes old.

Note, 365 is set for the Days of a Year above, yet the Julian Account makes it to consist of six Hours more.

Therefore I multiply 6 by 23, the young Man's Age in Years, and it makes 138 Hours; this multiplied by 60 the Minutes in an Hour, makes 8280 Minutes to be added to 12088800 Minutes.

8280

Which makes in all 12097080 Minutes in 23 Years.

What is the Result or total Product of

Multiplied by

527527
285
2037035
4220210
1055054
150345195
527535

$$\begin{array}{r}
 527535 \\
 15728 \\
 \hline
 4220280 \\
 1055070 \\
 3692745 \\
 2637675 \\
 527535 \\
 \hline
 8297070480
 \end{array}$$

$$\begin{array}{r}
 275827 \\
 19725 \\
 \hline
 1379135 \\
 551654 \\
 1930789 \\
 2482443 \\
 275827 \\
 \hline
 5446687575
 \end{array}$$

When Cyphers are intermixt with Figures in the Multiplier, then multiply by the Figures as above; and when you come to a Cypher in the Multiplier, then set down another Cypher exactly and perpendicularly under it; then begin the Multiplicand again with the next Figure to the Cypher in the Multiplier, and go through it in the same Line, placing the first Figure of that Product next to the Cypher towards the Left-hand; but then heed must be taken, that the next Figure or Cypher of the next Line must be set down one Degree farther towards the Left-hand, and not immediately under the last Figure set down next to the Cypher: As in the following Examples may be fully understood.

24393	7864371	327586
402	23604	6030
48786	31457484	9827580
975720	471862260	19655160
	23593113	
9805986	15728742	1975343580
	185630613084	

When you have a Cypher or Cyphers in the Multiplier at the Beginning towards the Right-hand; then set it or them backwards from the Place of Units towards the Right Hand; and when you have multiplied by the Figure or Figures, annex the Cypher or Cyphers:

As in these Examples.

4762	47962	4632
70	400	2600
333340	19184800	27792
		9264
		12043200

If you have Cyphers in the Units Places, &c. both in the Multiplicand and Multiplier, then neglect the Cyphers in both, and multiply by the Figures, and annex as many Cyphers to the Total Product as is the Sum of the Cyphers, both in the Multiplicand and Multiplier.

As in these Examples.

42600	42300	376400
220	12000	2400
852	846	15056
852	423	7528
9372000	507600000	903360000

When you are to multiply by 10, 100, 1000, or 10000; it is only adding or annexing so many Cyphers to the Multiplicand, as is in the Multiplier, that is, either 1, 2, 3, or 4 Cyphers, and the Work is done. *Example*, Suppose I am to multiply 375 by the Numbers above; if I multiply it by 10, then I join 0 to 375, and then it makes, or the Product is, 3750: If by 100, then I annex 00, and then it makes 37500: If by 1000, I put to it 000, and then it produces 375000: And lastly, if by 10000, I then add 0000, and then it makes 3750000, &c. And thus may any Number be multiplied, when the Multiplier consists of an Unit with any Number of Cyphers.

Suppose you want to know how many Half-crowns there are in 246l. you know that 8 Half-crowns make a Pound, therefore set them down thus:

246 l.
Multiply by 8 the Half-crowns in a Pound.

Answer 1968 Half-crowns in all.

Again, In 1968 Half-crowns how many Pence?
Multiply by 30 the Pence in a Half-crown.

Answer 59040 Pence in 1968 Half-crowns.

And this serves to make out, that great Denominations are brought into smaller by this Rule.

248 The YOUNG MAN's Companion.

Admit you wanted to know the Contents of a large Shuff-board Table 34 Foot long, and 4 Foot wide.

Multiply 34 the Length,
by 4 the Breadth, and the

Answer will be 136 square Feet for the true Contents of such a Table.

If I know the Value of a Yard of Broad-cloth to be 12 Shillings, what is the Value of 220 Yards of the said Cloth in Shillings?

Multiply by 12

44
22

Answer 2640 Shillings, or 132 l.

If the Wages of one Seaman be 23 Shillings a Month, What are the Wages of 250 Seamen for the same Time?

Multiply by 23

75
50

Answer 5750 Shillings, or 287 l. 10 s.

Suppose a Piece of Land be 236 Poles in Length, and 182 in Breadth, How many square Poles are therein?

Note, That a Pole in Length is 16 Foot and an Half, and a Pole of Land is a square Piece of Ground, 16 Foot and an Half each Way.

This may be multiplied as before, beginning at the Figure 2 of the Breadth, saying, 2 Times 6 is 12, setting the 2 of the 12 under the overmost Line, keeping 1 in Mind. Next, 2 Times 3 is 6, and the 1 kept in Mind makes 7, &c. so continue till all the three Figures are done with.

Length in Poles	236
Breadth in Poles	182
	472
	1888
	236

Poles in all the Land 42952

La

The YOUNG MAN's Companion 149

Lastly, Adding up the three Rows of Figures thus produced, the Total 42952 will be the square Poles sought for.

How many Barley Corns will reach from London to Bedford, if they are 40 Miles asunder?

First set down the whole Distance, viz. 40 Miles.
Then multiply by 8 the Furlongs in a Mile 8

And the Product is 320 Furlongs
Multiply this by 40 the Poles in a Furlong 40

And the Product is 12800 Poles
Multiply this by 11 the $\frac{1}{2}$ Yards in a Pole 11

12800
12800

And the Product is 140800 Half Yards
Multiply this by 18 the Inches in a $\frac{1}{2}$ Yard 18

1126400
140800

And the Product is 2534400 Inches
Multiply this by 3 the Barley }
Corns in an Inch ——— } ——— 3
And the Product is 7603200 Barley Corns

in 40 Miles, the Distance from London to Bedford.

Suppose it was ask'd, how many Barley Corns in Length will reach from London to York, which is commonly accounted to be 150 Miles.

First set down the 150 Miles, and multiply as in the last Question, and you will find the last Product to be 28 Millions, 512 Thousand Barley Corns.

Note, An English Mile is 8 Furlongs, (as above.)
A Scottish and Irish Mile, about one Mile and an Half English.

A Dutch and Polish Mile, three English Miles and an Half.
A French, Italian, and Turkish League, near 2 Miles and 3 Quarters English Miles.

150 *The YOUNG MAN's Companion.*

A German Mile better than 4 English Miles.

The Russian Mile, about 3 Quarters of an English Mile.

The Arabian Mile, an English Mile and a Quarter.

The Hungarian Mile, is 5 Miles English.

The Moguls Mile, a Mile and an Half English.

If one Seaman has 14 s. the Month's Wages, what will the Wages of 3349 Seamen, for the same Time, come to?

$$\begin{array}{r}
 3349 \\
 14 \\
 \hline
 13396 \\
 3349 \\
 \hline
 46886 \text{ Shillings}
 \end{array}$$

The Answer is 46886 Shillings, which you may reduce into Pounds by the second Example in Reduction.

If there is a square pitched Field of Soldiers, containing 148 Men in Rank, and 148 Men in File, how many Men are they?

$$\begin{array}{r}
 148 \\
 148 \\
 \hline
 1184 \\
 592 \\
 148 \\
 \hline
 \text{Answer } 21904 \text{ Soldiers}
 \end{array}$$

If an Orchard contains 10 Squares, and every Square 10 Trees, and every Tree 10 Branches, and every Branch 10 Apples, How many Apples are there in the Orchard? I answer, Ten Thousand, viz.

$$\begin{array}{r}
 \text{The Number of Squares} \quad 10 \\
 \text{The Trees in one Square} \quad 10 \\
 \hline
 \text{The Trees in all} \quad 100 \\
 \text{The Branches in a Tree} \quad 10 \\
 \hline
 \text{The Branches in all the Trees} \quad 1000 \\
 \text{The Apples on a Branch} \quad 10 \\
 \hline
 \text{The Apples in the whole Orchard} \quad 10000
 \end{array}$$

Multi-

Multiplication of Money.

Multiplication of Money (what most would learn above every Thing) hath great Affinity with Addition of Money; the same Method being taken in carrying from one Denomination to the next, viz. from Farthings to Pence, from Pence to Shillings, and from Shillings to Pounds. And as in Addition, (and other Multiplications) you begin at the Right-hand, and proceed towards the Left; so here you begin at the least Denomination, which is also at the Right-hand.

This Method of Accompting is the most apt and expeditious of all others, for smaller Quantities; and therefore extremely necessary in making Bills of Parcels, &c. And is, beyond all Contradiction, as sure and certain as any Way whatsoever.

The general Rule

Is always to multiply the Price by the Quantity.

The first Step is, for Quantities from 2 to 12; and this is done by one Multiplier; as in the Examples following:

Example 1. *What must I give for 6 Pieces of Cloth, if one cost 7*l.* 12*s.* 6*d.**

<i>l.</i>	<i>s.</i>	<i>d.</i>
7	12	6
Multiply the Price by		6

And the Product is the Answer, viz. *l.* 45 15 0

Here I say 6 Times 6 is 36 Pence, which is just 3*s.* I set down 0 in the Place of Pence, and carry 3*s.* to the Place of Shillings, (exactly the same as in Addition of Money); then 6 Times 12 is 72, and 3 is 75*s.* or 3*l.* 15*s.* wherefore I set down 15 in the Place of Shillings, and carry 3 to the Pounds; then 6 Times 7 is 42 and 3 is 45*l.* So the whole Amount of the 6 Cloths, at 7*l.* 12*s.* 6*d.* per Cloth, is 45*l.* 15*s.* as in the Work, and very concise.

Example 2: *What is the Value of 9 Yards of Silk at 13*s.* 4*d.* per Yard?*

<i>s.</i>	<i>d.</i>
13	4
Multiply the Price by	
9	
Answer	
<i>l.</i>	<i>s.</i>
6	0
4	0
In	

152 *The YOUNG MAN's Companion.*

In this Example I say, 9 Times 4 is 36 *d.* or 3 *s.* I set down 0 and carry 3; then 9 Times 3 is 27, and 3 makes 30; I set down 0, and carry 3, (as in Multiplication of simple Numbers) then 9 Times 1 is 9, and 3 is 12; which being the Tens of Shillings, consequently they are Angels; which being halved, make just 6 *l.* and so much is the Value of 9 Marks, or any Thing else at that Price, viz. 13 *s.* 4 *d.*

Example 3. *What comes 12 Gallons of Wine to, at 5s. 4d. per Gallon?*

Here I say, 12 Times 4 is 48, 0 and carry 4; then 12 Times 5 is 60, and 4 is 64 *s.* or 3 *l.* 4 *s.*

<i>s.</i> 4	
5 4	
12	
L. 3 4 0	

The next Degree or Step of Advance in this Way of Reckoning, is of Quantities exceeding 12, even to 12 Times 12, or 144; all which, as far as 144, are found in that excellent Table the Table of Multiplication; which is a ready Help to all Purposes of Reckoning, and particularly in this Way: And that you may proceed with Dexterity, you must be very perfect in the said Table, that you may be immediately apprehensive what component Parts hit your Quantity proposed, or pretty near it; (for any Quantity below 12 needs no Recollection at all, as in the two Examples foregoing) and then work accordingly; as 15 Yards at, &c. I readily know that 3 and 5, or 5 and 3, are to be my Multipliers. If to 21, then 3 and 7, or 7 and 3, as above. If to 30, then 5 and 6, also 3 and 10, or 10 and 3. If to 45, 48, 56, 66, 72, 96, &c. then 5 and 9, 6 and 8, 7 and 8, 6 and 11, 6 and 12, &c. are to be Multipliers, and exactly hit their several Quantities of which they are component Parts; and Examples of this Kind have two Multiplications for their Solution.

When the Quantity proposed is a Number irregular, or such a Number, that no two Numbers in the Table can be found to answer it, then we must multiply by two such Numbers as come pretty near it, as is said above; and for the Number wanting to make up the Number or Quantity proposed, multiply the given Price of one of the Numbers that is wanting, which will make three Products by three

Multi-

The YOUNG MAN's Companion. 153

Multiplications; which last Product must be added to the foregoing Products resulting from two Multiplications, and the Total will be the Answer.

And first, I shall shew Examples of the second Step, *viz.* of regular Quantities that exceed 12, and are precisely answer'd at two Multiplications, such as mentioned above, *viz.*

What comes 15 Yards of Muslin to, at 3 s. 5 d. per Yard.

Here 3 Times 5 is 15 *d.* or 1 *s.* 3 *d.* 3 and carry 1; then 3 Times 3 is 9, and 1 is 10. So the first Product is 10 *s.* 3 *d.* which I multiply by 5, saying, 5 Times 3 is 15 *d.* or 1 *s.* 3 *d.* 3 and carry 1; then 5 Times 10 is 50, and 1 is 51 *s.* or 2 *l.* 11 *s.* So the whole Amount of 15 Yards, at 3 *s.* 5 *d.* per Yard, is 2 *l.* 11 *s.* 3 *d.* And demonstrable thus, *viz.* If 10 *s.* 3 *d.* be the Value of 3 Times 3 *s.* 5 *d.* then 5 Times the Value of 10 *s.* 3 *d.* must of Necessity be 15 Times the Value of 3 *s.* 3 *d.* because 5 Times 3 is 15: And its Truth may be proved by Addition and Multiplication, thus: set down 3 *s.* 5 *d.* 3 Times, in Additional Order, and put the three Lines together, and the Total of them multiply by 5, as before, and the Answer will be the same. Or set down 17 *s.* 1 *d.* (the Product of 3 *s.* 5 *d.* multiplied by 5) 3 Times also, and add them together, and the Total will be exactly the same with the Result by Multiplication; as in the following Specimen of the Work.

(1)	(2)	(3)
<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
3 5	3 5	17 1
3 5	5	17 1
3 5		17 1
10 3	17 1	2 11 3
5		
2 11 3		

Here the first of these two Proofs is worked by Addition and Multiplication, and the second by Multiplication (as per Margin) and Addition. Also,

H 5

P

By this we see, that in all Examples under this Head, we are to pitch two Numbers (for Multipliers) in the Table; which multiplied together, make the Quantity proposed; and then we are to multiply the Price by one of the Numbers, it matters not by which first) and then that Product is to be multiplied by the other Number, and the second or last Product will be the Answer.

Example. *What is the Value of 21 Gallons of Brandy at 7s. 9d. per Gallon.*

$$\begin{array}{r}
 s. \quad d. \\
 7 \quad 9 \\
 7 \text{ and } 3 \\
 \hline
 2 \quad 14 \quad 3 \\
 \quad \quad 3 \\
 \hline
 8 \quad 02 \quad 9 \\
 \hline
 \end{array}$$

In this Example I say, 7 Times 9 is 63d. or 5s. 3d. I set down 3 and carry 5; then 7 Times 7 is 49, and 5 is 54s. or 2l. 14s. So the first Product is 2l. 14s. 3d. which I multiply by 3, and that produces the last Product or Answer, viz. 8l. 2s. 9d.

More Examples.

Example. *What comes 30 Ells of Holland to at 3s. 7d. per Ell?*

$$\begin{array}{r}
 s. \quad d. \\
 3 \quad 7 \\
 10 \text{ and } 3 \\
 \hline
 1 \quad 15 \quad 10 \\
 \quad \quad 3 \\
 \hline
 \text{Answer } 5 \quad 07 \quad 06 \\
 \hline
 \end{array}$$

Example. *45 Pounds of raw Silk at 15s. 6d. per lb.*

$$\begin{array}{r}
 s. \quad d. \\
 15 \quad 6 \\
 5 \text{ and } 9 \\
 \hline
 3 \quad 17 \quad 6 \\
 \quad \quad 9 \\
 \hline
 \text{Answer } 34 \quad 17 \quad 6 \\
 \hline
 \end{array}$$

Example. *56 Bushels of Wheat at 4s. 9d. per Bushel.*

$$\begin{array}{r}
 s. \quad d. \\
 4 \quad 9 \\
 7 \text{ and } 8 \\
 \hline
 1 \quad 13 \quad 3 \\
 \quad \quad 8 \\
 \hline
 \text{Answer } 13 \quad 6 \quad 0 \\
 \hline
 \end{array}$$

In the first Product of this Example, I say, the Half of 7 is 3 and an Half, or 3l. 10s. And in the last, the Half of 15 is 7 and an Half, or 7l. 10s. &c.

Example.

The YOUNG MAN's Companion. 155

Example. 72 Broad Pieces
at 23 s. 6 d. each.

s.	d.
23	6
	12 and 6
14	2 0
	6

Answer 84 12 0

Example. 108 Pounds of
Indigo Labors at 7s. 8d. per
Pound.

s.	d.
7	8
	9 and 12
3	9 0
	12

Answer 14 8 0

In the first Product the Half
of 28 Angels is 14 l. &c.

l. s. d.

Example. 96 C. of Currants at 2 13 6 the C.
8 and 12

21	8 0
	12

Answer 256 16 0

The next Gradation of Advance is of Quantities irregular, or of Numbers that are not to be answer'd precisely at two Multiplications: In this Case, there ariseth no Increase of Difficulty, but it is as easy as the Examples foregoing; only here you will have an Addition of one Line more, occasioned by bringing down the Price of one to be added to the last Product; or else a Line more made by multiplying the Price by what is defective or wanting in the Number by two Multiplications, to make up the proposed Quantity compleat; as it may be of 2, 3, 4, 5, &c. as by the subsequent Examples may be seen and understood.

Example. What is the Product of 21. 13 s. 6 d. multiplied by 39?

l.	s.	d.
2	13	6
		6 and 6

Here I find that 6 multiplied by 6, makes 36; which is within three of the Quantity proposed; wherefore I multiply by 6, and that Product again by the other 6; the last Product is 96 l. 6 s. which is the Value of 36; but we want to know the Value of 39; wherefore I multiply the Price of one,

16	01 0
	6
96	06 0
	8 00 6
104	06 6

Answer

viz.

156 The YOUNG MAN's Companion.

viz. 2*l.* 13*s.* 6*d.* by 3 that is defective or wanting to make up 36 to 39, saying, 3 Times 6 is 18*d.* &c. And find that 3 Times 2*l.* 13*s.* 6*d.* is 8*l.* 0*s.* 6*d.* which added to 96*l.* 6*s.* the Total, which is 104*l.* 6*s.* 6*d.* gives the compleat Value of 39; for 36 and 3 make 39. See the Work.

Example. *What comes 79 C. of Cheese to, at 28s per C.*

<i>s. d.</i> 28 0 7 and 11 9 16 0 11 107 16 0 2 16 0 110 12 0	In this Example I say, 7 Times 0 is 0; then 7 Times 8 is 56, 6 and carry 5; and 7 Times 2 is 14, and 5 is 19; the Half of which is 9 and an Half, or 9 <i>l.</i> 10 <i>s.</i> So the first Product is 9 <i>l.</i> 16 <i>s.</i> which multiplied by 11, produces 107 <i>l.</i> 16 <i>s.</i> or the Value of 77; then for 2 wanting. I multiply the Price by it, and that gives 2 <i>l.</i> 16 <i>s.</i> which added to 107 <i>l.</i> 16 <i>s.</i> makes the whole Value 79, <i>viz.</i> 110 <i>l.</i> 12 <i>s.</i> as in the Work. Or, as there are no Pence
--	---

in the Price, you may multiply 28*s.* by 79, without bringing it into Pounds, as you work it, but omit it till the last, and then cut off or separate the last Figure or Cypher of the Product towards the Right hand, and halve those towards the Left, which will be Pounds, and the Figure cut off Shillings, as in this Example.

The Half of 2 is 1, and the Half of 2 is 1, and the Half of 1 is 0, which 1 joined to the 2 severed from 221, makes 12; so the Answer 110*l.* 12*s.* as before.

s.
28
79

252
196

2212

l. 110 12

Example. 112 Pounds of Sugar at 5*d.* $\frac{1}{2}$ per lb. Set it down thus :

d.
5 $\frac{1}{2}$ per Pound,
10 and 10

4 07
10

2 05 10

05 06 the Product of 5*d.* $\frac{1}{2}$ by 12 defective.
2 11 04 the Answer.

Here,

Here, after I have multiplied by 10 and 10 the Parts of 100, there wants 12; wherefore I multiplied $5d. \frac{1}{2}$ by 12, and it gives $5s. 6d.$ for 12lb. at $5d. \frac{1}{2}$, which added to $2l. 5s. 10d.$ the Value of 100, makes $2l. 11s. 4d.$ the true Value of 112 lb. at $5d. \frac{1}{2}$ per Pound.

Example. 94 Stone of Beef at 22 d. or 1s. 10d. per Stone.

s. d.
1 10
10 and 9
—
18 4
9
—
8 0; 0
7 4
—
8 12 4 Answer.

Here, what is wanting, after the two Multiplications, is 4; wherefore I multiply 1s. 10d. (the Price) by 4, which produces 7s. 4d. to be added, &c.

Example. 37 C. and an Half of Raisins at 25s. 6d. per C.

s. d.
25 6
9 and 10
—
11 09 6
10
—
114 15 0
8 18 6
12 9 for the $\frac{1}{2}$ C. 6s. 3d. for the Answer.

After I have multiplied by 9 and 10, I multiply the Price 25s. 6d. by the Quantity wanting, and it produces 8l. 18s. 6d; then for the Half C. I take Half of the Price, which is 12s. 9d. and then collect the three Lines, the Total of which is 124 l.

124 06 3 Answer.

Note, From the last Example may be observed, That there is no Need of being too solicitous to come so very near by two Multiplications; for there 7 is wanting to make up the true Quantity; nay, if the two Multiplications be short by 10 or 12, it is near enough; for 'tis as easy to multiply the Price by 10 or 12, as by 2 or 3, and the Addition is the same.

Example. Once more: *What comes 110 C. $\frac{3}{4}$ of Hops to,* at 4l. 10s. 6d. per C.

l. s. d.

l. s. d.
 4 10 06
 10 and 10

45 05 00
 10

 452 10 00
 45 05 00
 2 05 03
 1 02 07½

501 02 10½ Answer.

After I have multiplied by 10 and 10, which makes 100; I multiply the Price 4*l.* 10*s.* 6*d.* by 10 that is wanting, which gives the same with the first Product, *viz.* 45*l.* 5*s.* which stands under the Product by 100; and for the ½ of a C. I take ½ of the Price, *viz.* first the Half, and then the Half of that Half, that is, 2*l.* 5*s.* 3*d.* and 1*l.* 2*s.* 7*d.* ½; which four Lines added together make 501*l.* 2*s.* 10*d.* ½ for the Answer.

To prove Multiplication.

DIVIDE the Product by the Multiplicand, or Multiplier, and the Quotient will be one of them.

This you cannot do before you have learnt the next Rule, *viz.* DIVISION. For the present therefore take this Method, *viz.* As you multiplied the Multiplicand by the Multiplier, so contrarywise multiply the Multiplier by the Multiplicand; and if the Products are alike, the Work is right; otherwise one of them is wrong, and must be gone over again till they do agree.

Example 1.

365 Days in a Year.

24 Hours in a Day.

1460

730

8760 Answer.

1460

730

8760

Here (reverſely) I ſay, 5 Times 4 is 20; 0 and carry 2; 6 Times 4 is 24, and 2 is 26; 6 and carry 2; and 3 Times 4 is 12, and 2 is 14; ſo that the whole Product is 1460. Then 5 Times 2 is 10; 0 and carry 1; 6 Times 2 is 12, and 1 is 13; 3 and carry 1; and 3 Times 2 is 6, and 1 is 7, which makes 730. Which Products added together make 8760 the Hours in a Year, as above, without taking in the odd 6 Hours, which the Year doth conſiſt of more than 365 Days.

Example

Example 2. 56 Gallons of Spirits, at 3s. 2d. per Gallon.

s. d. I say here, twice 7 is 14; 2 and

3 2 carry 1 s. and 3 Times 7 is 21, and 1 is

7 and 8 22s. or 1l. 2s. Again, twice 8 is 16s.

4 and carry 1s. and twice 8 is 16, and 1

is 17s. 17 and carry 0; and once 8 is

8l. Thus both these Examples are the

same in Consequence, as if you proceed-

ed in the common and regular Method

of Multiplication; and shews the Truth

of Operation.

The next Rule in Order, of Course, is DIVISION.

DIVISION

TELLS us how often one Number or Sum is contained in another.

As great Names are brought into small by Multiplication, as Pounds into Shillings, Pence, or Farthings, &c. so by Division small Names are turned into great, as Farthings into Pence, Shillings, or Pounds, &c.

Observe, that the Remainder is ever of the same Name with the Dividend, and is always less than the Divisor; for if it be more, or equal to the Divisor, the Work is wrong.

In Division (as in Multiplication) there are three Terms to be kept in the Memory, (that is to say) the *Dividend*, *Divisor*, and the *Quotient*, which will plainly appear by the Question that follows.

Example. Let 576 l. be divided among four Men. The two Numbers are placed thus;

Divisor, Dividend, Quotient,

4) 576 (

The Number 576 is called the Dividend, the Figure 4, before it, (which is to divide by) is called the Divisor; and those Figures that shall be in the last crooked Line, are called the Quotient.

Now to divide the aforementioned Sum 576 l. among four Men, take Pen, Ink, and Paper, and set the Sum thus, 4) 576 (

and work it with the Pen, according to the Reading which follows:

Saying;

160 *The YOUNG MAN's Companion.*

Saying; How often can I have 4 in 5; but 1 Time; therefore I set the Figure 1 in the crooked Line, called the Quotient, and say, 1 Time 4 is 4, setting the 4 under the 5, and subtracting it from it, saying, 4 from 5 and there remains 1.

Next, I make a Dot under the Figure 7, which is to shew I have taken it down, and set the 7 next to the 1: Then I ask how oft I can have the Divisor 4 in 17, which I find will be 4 Times; so I set the Figure 4 in the Quotient, and say, 4 Times 4 is 16, which I set under the 17, and subtract it from it, and there remains 1, as in the Margin.

Lastly, I make a Dot at the third Figure of the Dividend, which is 6, and take it down, and set it by the 1; and it makes 16: Then I ask how many Times I can have 4 (the Divisor) in 16, and find 4 Times: I set 4 in the Quotient, and multiply the Divisor 4 by the 4 I set in the Quotient, which makes 16, and set it under 16, and subtracting, find 0 remains, as in the Margin.

$$\begin{array}{r} 4) 576 \text{ (1)} \\ \underline{4} \\ 1 \end{array}$$

$$\begin{array}{r} 4) 576 \text{ (14)} \\ \underline{4.} \\ 17 \\ \underline{16} \\ 1 \end{array}$$

$$\begin{array}{r} 4) 576 \text{ (144)} \\ \underline{4..} \\ 17 \\ \underline{16} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

So that 576 *l.* divided among four Men, each Man must have 144 *l.*

The Proof is by multiplying the Divisor 4 in the Quotient 144, and the Product will be 576, thus:

$$\begin{array}{r} 144 \\ \underline{4} \\ \text{Proof } 576 \text{ equal to the Dividend.} \end{array}$$

To divide 32956 by 7.

Set it down thus:

And ask how oft can I have 7 in 32? I can have it 4 Times, therefore I set 4 in the Quotient, and say, 4 Times 7 is 28, take 28 out of 32, and there remains 4, which set under the 8, as in the Margin.

$$\begin{array}{r} 7) 32956 \text{ (4)} \\ \underline{28} \\ 4 \end{array}$$

Next,

Nex
take it
of the
in the
I have
vidual
the Q
by tha
set unc
the M
Ne
and ta
the R
say, I
which
I set
gin.
La
of th
that
make
How
visor
8 Tir
visor,
ing 5
subst
Mar
divid
Set t
A
cut
N
Divi
deno
Quo
it, a
subst
fore
100

Next, I dot at 9 in the Dividend, and take it down and set it by the Remainder of the Subtraction, and it makes 49 as in the Margin; then I say, How oft can I have 7 the Divisor in 49 the new Dividual? and it being 7 Times, I set 7 in the Quotient, and multiply the Divisor by that 7, which makes 49, which 49 I set under the other, and subtract as in the Margin, and there remains 0.

$$\begin{array}{r} 7) 32956 \quad (47 \\ 28. \\ \hline 49 \\ 49 \\ \hline 0 \end{array}$$

Next, I make a Dot at the Figure 5, and take it down and set it by the 0, in the Remainder of the Subtraction, and say, How oft can I have 7 out of 5? which because I cannot have at all, I set 0 in the Quotient, as in the Margin.

$$\begin{array}{r} 7) 32956 \quad (470 \\ 28.. \\ \hline 49 \\ 49 \\ \hline 05 \end{array}$$

Lastly, I make a Dot at the last Figure of the Dividend, which is 6, and bring that down, and set it by the 5, and it makes 56 for a new Dividual, and say, How many Times can I have 7 the Divisor out of 56 the Dividual, and find it 8 Times; therefore I multiply 7 my Divisor, by 8 in the Quotient, and it being 56, I set it under the Dividual, and subtract, and find 0 remains, as in the Margin. Thus the Number 32956 is divided into 7 Parts, 1 Part being 4708.

$$\begin{array}{r} 7) 32956 \quad (4708 \\ 28... \\ \hline 49 \\ 49 \\ \hline 56 \\ 56 \\ \hline 0 \end{array}$$

Divide 879601. among 20 Men,

Set the Sum thus : $20) 879610$ (

And because there is a 0 in the last Place of the Divisor, I cut off one Place in the Dividend, and work without it.

Next, I say, How oft can I have the Divisor 2 in the first Figure of the Dividend 8? it being 4 Times, I set 4 in the Quotient, and multiply 2 the Divisor by it, and it being 8 I set it under 8, and subtract 8 from 8 and 0 remains, and then proceed as before. The same is to be observed, as if you divide by 10, 100, &c. or 30, 40, 200, &c.

$$\begin{array}{r} 4|0) 879610 \quad (4 \\ 8 \\ \hline 0 \end{array}$$

Let

Let 207361. be divided among 12 Men.

I set the Sum thus :

12) 20736 (

There being two Figures, I make a Dot at o, the second Place of the Dividend, and count it 20; then I ask, How oft I can have the Divisor 12 out of the Dividual 20? I find but once, therefore I set one in the Quotient, and multiply 12 the Divisor by 1, and set it down under 20, and draw a Line and subtract, and there remains 8; I set it down under it, and it will stand in the Margin.

$$\begin{array}{r} 12) 20736 \text{ (1} \\ \underline{12} \\ 8 \end{array}$$

Next, I make a Dot at the third Figure of the Dividend, which is 7, and bring it down and set it on the Right-hand of the Figure 8, and it makes 87 for a new Dividual; then I ask, How oft I can have 12 the Divisor out of 87 the Dividual? which being 7 Times, I set 7 in the Quotient, and multiply 12 the Divisor by it, and it being 84, I set it under the 87, and drawing a Line, I subtract 84 from 87, and there remains 3, and the Work will stand as in the Margin.

$$\begin{array}{r} 12) 20736 \text{ (17} \\ \underline{12 \dots} \\ 87 \\ \underline{84} \\ 3 \end{array}$$

Next, I make a Dot at the fourth Figure of the Dividend, which is 3, and bring it down, and set it on the Right-hand of 3, the Remainder of the last Subtraction, and it makes 33 for a new Dividual; then I ask, How oft I can have 12 the Divisor out of 33? And it being twice, I set a Figure of 2 in the Quotient, and multiplying 12, the Divisor, by 2, it makes 24, which I set under 33, and draw a Line, and having subtracted it from 33, there remains 9, and the Work will stand as in the Margin.

$$\begin{array}{r} 12) 20736 \text{ (172} \\ \underline{12 \dots} \\ 87 \\ \underline{84} \\ 33 \\ \underline{24} \\ 9 \end{array}$$

Next,

The YOUNG MAN's Companion. 163

Next, I make a Dot at 6, the last Figure of the Dividend, and bring it down and set it at the Right-hand of the 9, and it makes 96 for a new Dividual; then I ask, How oft I can have the Divisor 12 out of the new Dividual 96, and it being 8 Times, I set 8 in the Quotient, and multiply the Divisor 12 by the Figure 8, and it makes 96, which I set under the Dividual 96, and drawing a Line, I subtract, and there remains 0, and the Work will stand as in the Margin.

$$\begin{array}{r}
 12) 20736 \text{ (1728)} \\
 \underline{12 \dots} \\
 87 \\
 \underline{84} \\
 33 \\
 \underline{24} \\
 96 \\
 \underline{96} \\
 0
 \end{array}$$

So that if 20736 Pounds is to be divided between 12 Men, each Man will have 1728 l.

Divide 8060 Pounds of Tobacco equally among 8 Men.

Here I say, the 8's in 8 once, which I put in the Quotient: then the 8's in 0 no Times, which I likewise put in the Quotient; then the 8's in 6, 0 Times again, which is also placed in the Quotient, and there remains 6, to which I bring down 0, the last of the Dividend, and it makes 60; lastly, the 8's in 60,

$$\begin{array}{r}
 8) 8060 \text{ (1007)} \\
 \underline{8 \dots} \\
 060 \\
 \underline{56} \\
 4
 \end{array}$$

7 Times, and 7 Times 8 is 56 from 60 and there remains 4: So the Quotient shews that each Person must have 1007 Pounds of Tobacco for his Share in the Dividend 8060, and there remains 4 Pounds over and above, which makes half a Pound more due to each Man, because 4 the Remainder is half of 8 the Divisor. And so the Work is done, the Quotient giving to each Man 1007 Pounds and half for his equal Share.

A quicker Way for Dispatch, when the Divisor is a single Figure, will be to work as in the Examples following:

	(1)	(2)	(3)
	4) 78906	5) 34567	6) 29702
Quotient	19726 (2)	6913 (2)	4950 (2)
	4	5	6
Proof	78906	34567	29702

In

164 *The YOUNG MAN's Companion.*

In the first of these Examples I say, 4's in 7 once, and there remains 3; which makes 8 the next Figure in the Dividend 38; then the 4's in 38, 9 Times, 9 Times 4 is 36, from 38, and there remains 2, which makes 9 the next Figure in the Dividend 29; then the 4's in 29, 7 Times, 7 Times 4 is 28, from 29, and there remains 1, which makes 10, the next Figure of the Dividend 10, and the 4's in 10 twice, twice 4 is 8, from 10, and there remains 2, which makes 6 the last of the Dividend 26; *lastly*, the 4's in 26, 6 Times, and 6 Times 4 is 24, from 26, and there remains 2. And so for the other two Examples. And for Proof of the Work, (or any other Example) multiply the Quotient by the Divisor, and take in the Remainder in the first Place, or Place of Units; and if the Product be the same with the Dividend, the Work is right: For I say, 4 Times 6 is 24, and 2 the Remainder makes 26, 6 and go 2, &c.

More Examples by a single Figure.

3) 54321	7) 279060	9) 234567
Quotient 18107 (0)	39865 (5)	26063 (0)
3	7	9
Proof 54321	279060	234567

This is the shortest Way of Division that can be by a single Figure.

As it is as necessary for Expedition to multiply by 11 and 12, as by a single Figure, to have the Product in one Line, so it is also to divide, as in these Examples, *viz.*

11) 72646206	12) 76677240
Quotient 6604200 (6)	6389770
11	12
Proof 72646206	76677240
11) 47627000	12) 42007400
Quotient 4329727 (3)	3500616 (8)
11	12
Proof 47627000	42007400

In

In the first of these Examples I say, the 11's in 72, answer 6 Times, &c. In the second I say, the 12's in 76, answer 6 Times, &c. In the third I say, the 11's in 47, 4 Times, 4 Times 11 is 44, from 47, and there rests 3, &c. In the fourth I say, the 12's in 42, 3 Times, 3 Times 12 is 36, from 42, and there remains 6, &c.

By being ready and dextrous in the Examples above, you may expeditiously divide by these Numbers, viz. 110, 120, 1100, or 1200, &c. for it is by cutting off, or separating the Cyphers from 11 and 12, (when these Numbers happen to be Divisors) and cutting off, or separating the like Number of Figures or Cyphers from the Right-hand of the Dividend, and then divide the other Figures or Cyphers towards the Left-hand, by 11 or 12, as it shall happen; as in Example following, viz.

Divide 34567 by 110, and 890123 by 120, and 98765 by 1100, and 678901 by 1200.

$$11|0) 34567$$

$$12|0) 890123$$

$$\begin{array}{r} \text{Quotient} \quad 314\frac{2}{11} \text{ or } \frac{346}{11} \\ 11|00) 98765 \end{array}$$

$$\begin{array}{r} 7417\frac{8}{12} \text{ or } \frac{8901}{12} \\ 12|00) 678901 \end{array}$$

$$\begin{array}{r} \text{Quotient} \quad 89\frac{8}{11} \text{ or } \frac{865}{11} \\ \hline \end{array}$$

$$\begin{array}{r} \text{Quotient} \quad 565\frac{9}{12} \text{ or } \frac{501}{12} \\ \hline \end{array}$$

Whenever you divide by 10, 100, 1000, or 10000, &c. you have nothing more to do than to cut off, or to separate so many Figures or Cyphers of the Dividend towards the Right-hand, as you have Cyphers in the Divisor, and those Figures towards the Left make your Quotient; and those you cut off towards the Right are the Remainder.

EXAMPLES.

Divide 123456789 by 10, 100, 1000, or 10000.

By 10 the Quotient is 12345678, and the Remainder 9.

By 100 the Quotient is 1234567, and Remainder 89.

By 1000 the Quotient is 123456, and Remainder 789.

By 10000 the Quotient is 12345, and Remainder 6789.

When the Divisor consisteth of several Figures, then there ariseth a little more Difficulty in the Work; but if the following Directions are heedfully attended to, the seeming Difficulty is easily overcome; as in the succeeding Example, viz.

Suppose

Suppose I am to divide 7891 Pounds among 32 Parishes, or suppose an Assessment of so much Money was laid on so many Parishes; What must each Parish pay by an equal Proportion towards the raising such a Supply?

Divisor 32) 78901 (. . . . Quotient.

The Example thus set out, I begin at the Left-hand, seeking how often I can take 32 out of 78; or more easily, How many Times 3 is there in 7, and the Answer is two Times, which I place in the Quotient thus, 32) 78901 (2, and then according to the general Rule of Working, I multiply the Divisor 32 by the 2 placed in the Quotient, saying, twice 2 is 4, and twice 3 is 6; so there is 64 to be taken out of 78, as it appears in the Margin.

$$\begin{array}{r} 32) 78901 (2 \\ \underline{64} \\ 14 \end{array}$$

Then I make a Point under 9, the third Figure of the Dividend, and bring it down to the Remainder 14, and then the Work appears as in the Margin.

$$\begin{array}{r} 32) 78901 (2 \\ \underline{64} \\ 149 \end{array}$$

Then I seek again, asking, how many Times 32 in 149, which is not readily to be answer'd; but how many Times 3, the first Figure in the Divisor, is there in 14, the two first Figures of the Dividual 149, and the Answer is 4 Times; wherefore after placing 4 in the Quotient, I multiply (as directed in the general Rule) the Divisor 32 by the said 4, saying, 4 Times 2 is 8, placing it under 9 in the Dividual; then 4 Times 3 is 12, and set it down under 14; so there is 128 to be taken out of 149, and then the Work appears as in the Margin.

$$\begin{array}{r} 32) 78901 (24 \\ \underline{64} \\ 149 \\ \underline{128} \\ 210 \end{array}$$

And after Substraction there remains 21; then I make a Point under 0 in the Dividend, and bring it down to the Right of the Remainder 21, and then there is 210 for a new Dividual; then (as the general Rule directs) I seek again, saying, How many Times 32 the Divisor is there in 210 the Dividual? or easier, How many Times 3 in 21? (For observe well, that whenever you have a Place more in the Dividual than in the Divisor, then always seek how oft you can take the first Figure of the Divisor out of the two first of the Dividual) and the Answer is 7 Times; but

it

it will not bear 7 Times, for 7 Times 32 is 224, and you cannot take 224 out of 210, or rather, you cannot take 22 out of 21; wherefore try in your Mind before you set down the Answer, or Figure in the Quotient, whether it will go the Number of Times as is most easily suggested; as here, the Question or Demand is readily answered 7 Times, and so many Times 3 may be taken in 21; but when you come to multiply the whole Divisor by the Times you place in the Quotient, you begin at the Right-hand and go towards the Left, carrying the Tens that arise to the next Place, which increases the Product so, that sometimes the Subtraction cannot be made, because the under Line is greater than the upper, or that which you should subtract from; wherefore first try in your Mind, as abovesaid, and since it will not bear 7 Times, try if it will go 6 Times, saying, 6 Times 2 is 12, 2 and carry 1, and 6 Times 3 is 18, and 1 is 19, and 19 may be taken out of 21, therefore set down 6, in the Quotient next to the 4, and multiply the Divisor 32 by it, and the Work will stand thus:

Here the Divisor 32 multiplied by 6 gives 192 to be taken out of 210, and the Remainder is 18; to which, after a Point made under it, I bring down the 1, the last Figure in the Dividend, and then there is 181 for a new Dividual; then, according to the Rule, I seek again, (for you are to note, That the abovesaid general Rule for Working must be as often repeated, as you bring down a Figure or Cypher from the Dividend, to make a new Dividual; and also, That for every Figure or Cypher brought down, there must likewise be a Figure or Cypher placed in the Quotient;) how many Times 32 the Divisor, may be taken out of 181 the Dividual, or how many Times 3 in 18, and the ready Answer is 6 Times; but on Trial I find it will not go 6 Times, wherefore I try a Time less by one, viz. 5 Times, and find it will bear it; and setting 5 in the Quotient next the 6, I multiply the Divisor 32 by it, and it produces 160, which subtracted from 181, the last Remainder, is 21, and the Quotient or Answer is 2465, and shews, that 32 is contain'd in 78901, 2465 Times, and 21 over, as *per* Work.

$$\begin{array}{r}
 32) 78901 \text{ (2465} \\
 \underline{64 \dots} \\
 149 \\
 \underline{128} \\
 210 \\
 \underline{192} \\
 181 \\
 \underline{160} \\
 21
 \end{array}$$

Again,

Again, *Admit a Nobleman hath 30000 l. per Annum, what is his daily Income?*

If you divide 30000 by 365 (the Days in a Year) the Quotient will be the Answer. Set it down for working thus,

365) 30000 (

First seek how many Times 365 can be taken in 3000; (an equal Number of Places with the Divisor) answer 8 Times; wherefore I go a Place further to the Right-hand in the Dividend, (for 0 must never begin the Quotient) and make a Point under it, *viz.* under the last 0 but one, (as may be seen in the Example) and there being a Place more in this pointed-out Dividual than in the Divisor, I seek how oft the first Figure of the Divisor, *viz.* 3, is contained in the two first Figures or Places of the Dividend, *viz.* 30, and the Answer is 10 Times; but you are never to take above 9 Times at once, in any of these Examples of Division, wherefore try in your Mind whether it will bear 9 Times, before you set it down in the Quotient, (as was said before) saying to yourself or in your Mind, 9 Times 5 is 45, 5 and go 4; and 9 Times 6 is 54, and 4 is 58, 8 and go 5; and 9 Times 3 is 27, and 5 is 32; now 32 cannot be taken out of 30, wherefore take a Time less by a Unit or One, *viz.* 8 Times, and finding it will go 8 Times, set 8 in the Quotient, and then say, 8 Times 5 is 40, 0 and carry 4; and 8 Times 6 is 48, and 4 is 52, 2 and carry 5; and 8 Times 3 is 24, and 5 is 29; and then there is 2920 to be taken from 3000, and there remains 80. Then to the Remainder 80 I bring down 0, the last of the Dividend, and then there is 800 for a new Dividual; then you must try how oft you can take 365 out of the said Dividual 800, and the Number of Places being equal both in Divisor and Dividual, to wit, 3, ask how oft 3 in 8? Answer, twice; so put 2 in the Quotient, and say, twice 5 is 10, 0 and carry 1; and twice 6 is 12, and 1 is 13, 3 and carry 1; and twice 3 is 6 and 1 is 7; so there is 730 to be deducted from 800, and the Remainder is 70, as in the whole Work may be seen.

Thus by the Work, the Nobleman hath 82 Pounds *per Diem*, and 70 Pounds over; which, if multiplied by 20 (the

$$\begin{array}{r} 365) 32000 \quad (8 \\ \underline{2920} \\ 80 \end{array}$$

(the Shi
duce 14
per said
out 3s.
a Rema
by 12 (c
ces 366
gives
30000
Divi
a Tun,
In th
find tha
I set do
2;2 un
after S
210, to
the D
2104.
will be
Quotie
plied b
substra
88; t
broug
seekin
of the
from
So tha
Gallo
which
theref
W
the fi
or Cy
Divi
the l
the I
Left
Divi
Sa
How

(the Shillings in a Pound,) would produce 1400 Shillings; which if divided per said Divisor 365, there would come out 3s. a Day more, and there will be a Remainder of 305, which multiplied by 12 (the Pence in a Shilling) produces 3660, which divided still by 365 gives 10d. a Day more. So that 30000l. a Year is 82l. 3s. 10d. a Day.

$$\begin{array}{r}
 365 \overline{) 30000} \quad (82 \\
 \underline{2920} \\
 800 \\
 \underline{730} \\
 70
 \end{array}$$

Divide 46242 Gallons of Canary, by 252 (the Gallons in a Tun.) Thus set down,

In this Example, after Enquiry, I find that it will not go twice, therefore I set down 1 in the Quotient and place 252 under 462 of the Dividend, and after Substraction the Remainder is 210, to which I bring down 4 from the Dividend, and the Dividual is 2104, and then seeking again, find it will bear 8 Times, which plac'd in the Quotient, and the Divisor 252 multiplied by it, the Product is 2016 to be subtracted from 2104, which being done the Remainder is 88; to which 2 (the last Figure of the Dividend) being brought down, there is 882 for the last Dividual; and then seeking again, I find it will go 3 Times, and the Product of the Divisor multiplied by 3, is 756, which subtracted from 882 there remains 126 for the last, or true Remainder. So that by this Division I find there are 183 Tuns in 46243 Gallons, and 126 Gallons remaining, or over and above, which being Half of 252 the Divisor, the Remainder is therefore Half a Tun more.

$$\begin{array}{r}
 252 \overline{) 46242} \quad (183 \\
 \underline{252} \\
 2104 \\
 \underline{2016} \\
 882 \\
 \underline{756} \\
 126
 \end{array}$$

When you have a Cypher or Cyphers in the Divisor in the first, second, or third Place, &c. separate such Cypher or Cyphers with a Dash of the Pen, from the rest of the Divisor; and also cut off as many Figures or Cyphers from the Right of the Dividend, as you cut off Cyphers from the Divisor, and divide the remaining Figures towards the Left-hand by the remaining significant Figures of the Divisor.

Suppose the King's Revenue came to 250000l. by the Year, How much comes it to by the Week?

I

Divide

Divide by 52 the Weeks in a Year.

Here because 5, the first Figure of the Divisor 52, is bigger than the first Figure of the Dividend 2, therefore I take 3 Places for the first Dividual, dotting at 0, which I count 250, saying, 52) 250000 (4
How oft can I have 52 out of 250? 208
or, How oft can I have 5, the first Figure of the Divisor, out of 25, the two first Figures of the Dividend? 42
which tho' I can have it just 5 Times, yet because I cannot have 5 Times 2 out of 0, the remaining Figure, I take it 4 Times, and set 4 in the Quotient, and multiply 52 the Divisor by that 4, which makes 208, which I set under the 250, and draw a Line and subtract, and there remains 42, and the Work will stand as in the Margin.

Next, I dot at the fourth Place of the Dividend, which is a Cypher also, and bring that down and set it at the Right-side of the 42, the Remainder after Substraction, and it makes 420 for a new Dividual; then I ask, How oft I can have the Divisor 52 out of the Dividual 420, or how oft can I have 5, the first Figure of 52, out of 42, the two first Figures of the Dividual, and find it will go 8 Times; therefore I set 8 in the Quotient, and multiply 52, the Divisor, by that 8, and it makes 416, which I set under the 420, and draw a Line and subtract and there remains 4; and the Work stands as in the Margin.

Next, I make a Dot at the fifth Place towards the Right-hand of the Dividend, and take down the Cypher, and set it at the Right-hand of the 4 that remained after Substraction, and it makes 40, but because I cannot have the Divisor 52 out of the new Dividual 40, I set a Cypher in the Quotient, and it will stand as in the Margin.

Next, I make a Dot at the last Place of the Dividend, and bring down the Cypher, and set it at the Right-hand of the 40 for a new Dividual, and it makes 400; then I ask, How oft I can have the Divisor 52 out of the Dividual 400? Or, how oft can I have 5 the first Figure of the

the Div
Figures
it will g
7 in th
the Div
which I
ing dra
there r
So th
250000
much o
was di
and 3/2

In 4
Acres?

Now
Land l
also be
the Su

Her
Diviso
it; an
dend t

The
and a
Diviso

will g
tient,
2, wh
it mal
42, a
as in

Th
gure
and b
Right
after
for a
oft I
fad i

the Divisor 52 out of the two first 52) 250000 (4807
 Figures of the Dividual 40, and find 208...
 it will go but 7 Times; therefore I set 7 in the Quotient and multiply 52
 the Divisor by 7, and it makes 364, which I set under the 400, and hav-
 ing drawn a Line I subtract, and there remains 36, as in the Margin.

So that if the King's Revenue for one Year comes to 250000 l. 'tis by the Week 4807 l. Remainder 36 is so much of a Pound, or 20 s. as it wants of 52, or if 20 s. was divided into 52 Parts, it is 13 Shillings, 10 Pence, and $\frac{3}{52}$ Parts of a Penny.

In 42952 Square Poles, or Perches of Land, how many Acres?

Now, because there are 16 Foot $\frac{1}{2}$ in a square Pole of Land both Ways, and 160 square Poles make an Acre; and also because there is a 0 or Cypher on the Right-hand, set the Sum down thus:

$$160) 42952$$

Here, because I have a Cypher in the first Place of my Divisor towards the Right, I cut it off, and work without it; and I also cut off a Figure in the first Place of the Dividend to the Right-hand, and the Sum will stand thus:

$$16|0) 4295|2 \quad (2$$

Then I make a Dot at the second Place of my Dividend, and ask, How oft I can have 16 my Divisor in 42 the Dividual, and find it will go 2 Times; I set a 2 in the Quotient, and multiply 16 the Divisor by 2, which I set in the Quotient, and it makes 32, therefore I set 32 under 42, and draw a Line, and subtract, and there remains 10, as in the Margin.

$$\begin{array}{r} 16|0) 4295|2 \quad (2 \\ 32 \cdot \\ \hline 10 \end{array}$$

Then I make a Dot at the third Figure of the Dividend, which is 9, and bring it down and set it on the Right-hand of the 10 which remain'd after Subtraction, and it makes 109 for a new Dividual; then I ask, How oft I can have 16 out of 109; and I find it will go 6 Times, therefore I

$$\begin{array}{r} 16|0) 4295|2 \quad (26 \\ 32 \cdot \\ \hline 109 \\ 96 \\ \hline 13 \end{array}$$

172 *The YOUNG MAN's Companion.*

set 6 in the Quotient, and multiply 16 the Divisor by 6 in the Quotient, and it makes 96, which I subtract from 109 and there remains 13, as in the Margin.

Then I make a Dot at 5, the Figure in the Dividend, and bring it down and set it at the Right-hand of 13, and it makes 135 for a new Dividual; then I say, How often can I have the Divisor 16 out of the Dividual 135? and I find it will go 8 Times, therefore I set 8 in the Quotient, and multiply 16 the Divisor by 8, and it makes 128, which I set down under 135, draw a Line and subtract, and there remains 7, as in the Margin.

$$\begin{array}{r}
 16 \overline{) 429512} \\
 \underline{96} \\
 135 \\
 \underline{128} \\
 7
 \end{array}$$

And the Answer is 268 Acres, and the Remainder is $\frac{72}{160}$ of an Acre, or 72 Poles.

If 7306242l. are to be equally levied upon 9034 Parishes, how much must each pay?

Divide the Pounds by the Parishes, and the Quotient shews the Pounds each Parish is to contribute.

Set the Sum down thus, 9034) 7306242 (

Now, because the 9, the first Figure of the Divisor, is more than 7, the first Figure of the Dividend, I must take a Place more of the Dividend for my Dividual, than the Number of the Figures in the Divisor, which is four Places, therefore I dot at 2, and say, How often can I have 9, the first Figure of the Divisor, out of 73, the two first Figures of the Dividend? which I find to be eight Times, therefore I set down 8 in the Quotient, and multiply the Divisor by 8, and set down the Product, which is 72272, under the Dividend, and draw a Line and subtract 72272 from 73062, and there will remain 790, and the Work will stand as in the Margin.

$$\begin{array}{r}
 9034 \overline{) 7306242} \\
 \underline{72272} \\
 790
 \end{array}$$

Next, I make a Dot at 4 in the Dividend, and bring it down and set it at the Right-hand of 790, the Remainder after Subtraction, and it will make the Dividual 7904; then I ask,

How

How oft I can have the first Figure of the Divisor 9 out of the first Figure of the Dividend, which is but 7, and because I cannot have it once, the Divisor 9034 being more than the Dividend 7904, I set a Cypher in the Quotient, and the Work will stand as in the Margin.

Next, I make a Dot at 2, the last Figure of the Dividend, and set it at the Right-hand of 7904 for a new Dividend, and ask, how oft I can have 9, the first Figure of the Divisor, out of 79, the two first Figures of the Dividend 79042, and I find it will go 8 Times, therefore I set 8 in the Quotient, and multiply the Divisor 9034 by 8, and the Product is 72272, which I set under the Dividend, and draw a Line and subtract, and there remains 6770, and the Work will stand as in the Margin.

$$\begin{array}{r}
 9034 \overline{) 7306242} \quad (808 \\
 \underline{72272} \\
 79042 \\
 \underline{72272} \\
 6770
 \end{array}$$

Now, if 7306242l. are to be equally levied upon 9034 Parishes, as above, then each Parish is to contribute 808l. but yet there remains the 6770l. to be divided, which you may reduce first into Shillings, and they make 135400, which divide by 9034, and the Quotient will be 14, and then 8924 Shillings will remain, which being reduced into Pence, the Product will be 107088, which being divided by 9034, the Parishes, the Quotient will be 11, and 7714 Pence will remain, which being reduced into Farthings, the Product will be 30856; this divided by 9034, the Quotient will be 3, and the Remainder will be 3754 Parts of 9034 of a Farthing. So that the whole Sum for each Parish to pay, is 808l. 14s. 11d. $\frac{3}{4}$ and $\frac{3754}{9034}$ Parts of a Farthing.

Divide 42952 square Poles of Land by 160, the square Poles in an Acre of Land.

Here the Cypher is cut off from the Divisor, and 2 from the Dividend; then I ask, How oft 16 in 42, Answer, twice; then the 16's in 109, Answer six Times; then the 16's in 135, Answer eight Times. So there are 268 Acres, and 7 remains; that is, 268 Acres $\frac{7}{16}$ or $\frac{72}{160}$, or almost Half an Acre.

$$\begin{array}{r}
 16 \overline{) 42952} \quad (268 \\
 \underline{32} \\
 109 \\
 \underline{96} \\
 135 \\
 \underline{128} \\
 7
 \end{array}$$

174 The YOUNG MAN's Companion.

Divide 6274620 by 2700.

27100) 62746120 (2323²³²⁸

54

87

81

64

54

106

81

25

In this Example the Cyphers are separated from the Divisor, and also two Places from the Dividend, and then 62746 is divided only by 27. See the Work.

When the Divisor is 3, 4, 5, 6, or more Figures, there is a sure and easy Way of performing the Work truly, by making a Table of the Divisor; which may be done by Addition, or by multiplying the Divisor by 2, 3, 4, &c.

What you are to divide 987654321 by 123456.

123456) 987654321 (8000

987648

6321

Here having noted the Number of Figures in the Divisor, which here is six, I make a Point under the seventh Figure, or Place of the Dividend, &c.

1 123456

2 246912

3 370368

4 493824

5 617280

6 740736

7 864192

8 987648

9 1111104

This Table is made by doubling the first Line, which is 246912, which added to the first or uppermost Line gives the third Line 370368, which also added to the said first Line makes 493824 for the fourth Line or Product; and so of the rest, still remembering to add the subsequent Line or Product to the first or uppermost Line, till you come to the last Line of 9 Times, which is 1111104. The Truth of which may be proved by multiplying the first or uppermost Line by 2, 3, 4, 5, &c. and if you commit an Error by Addition it may be found out, or corrected by Multiplication.

The Use of the said Table.

When you have pointed out your Number of Places in the Dividend, cast your Eye on the Table, and at the first View you may know how many Times you can take; as in this Example, 7 Times is too little, and 9 Times too much, wherefore I set down in the Quotient, and then multiply and subtract, and the Remainder is 6; to which I bring down 3, and put 0 in the Quotient; then to the 63 I bring down 2, and place another 0 in the Quotient; then to 632 I bring down 1, the last Figure of the Dividend; but still it will not bear any Time or Times, wherefore I put another 0 in the Quotient; and so the Work is done, and the Quotient is 8000, and the Remainder 6321; as in the Work.

Thus having plainly, fully, and pertinently shewn, by verbal Directions, the Method of working Division, I think it unnecessary to give any more Examples in that Manner; but shall leave some few Examples for Practice Sake, whose Quotients and Remainders are expressed, but the Operation omitted, to save Room, and for Trial of the Ingenuity of Practitioners.

7400690042 divided by 987, the Quotient is 7498166, and Remainder 200.

479679002742 divided by 4689, the Quotient is 102298784, and Remainder 4566.

7969767002 divided by 976294, the Quotient is 8163, and Remainder 279080.

456789012345 divided by 9876543, the Quotient is 46249, and Remainder 8775138.

76469747 divided by 4500, the Quotient is 16993, and Remainder 1249. And,

8092420000 divided by 345000, the Quotient is 23456, and remains 0.

The Proof of Multiplication and Division.

THESE two Rules reciprocally prove each other; for in proving Multiplication, if you divide the Product by the Multiplier, the Quotient will be like the Multiplicand; or if by the Multiplicand, the Quotient will be the same with the Multiplier.

L4.

Example.

Example.

$$\begin{array}{r}
 345 \\
 24 \\
 \hline
 1380 \\
 690 \\
 \hline
 24) 8280 \quad (345 \\
 72 \dots \\
 \hline
 108 \\
 96 \\
 \hline
 120 \\
 120 \\
 \hline
 0 \\
 \hline
 \end{array}$$

Or thus,

$$\begin{array}{r}
 345) 8280 \quad (24 \\
 690 \dots \\
 \hline
 1380 \\
 1380 \\
 \hline
 0 \\
 \hline
 \end{array}$$

To prove Division.

Division may be proved thus :

If there's any Remainder, first subtract it from the Dividend, and then if you divide the Dividend by the Quotient, the Quotient will be your former Divisor.

Example. Divide 8280 by 345.

Here the Working again is needless, it being above; and shews the Truth of the Assertion, that Division may be proved by Division, as aforesaid.

But the most usual Way of proving Division is by Multiplication, in this Manner, *viz.* multiply the Quotient by the Divisor, and the Product will be equal to the Dividend; as in the foregoing Example.

Note, That when there is any Remainder, such Remainder must be taken in or added to the Product.

$$\begin{array}{r}
 345 \text{ Quotient} \\
 24 \text{ Divisor} \\
 \hline
 1380 \\
 690 \\
 \hline
 8280 \text{ Proof} \\
 \hline
 \end{array}$$

As in Multiplication, I gave some Examples of its Usefulness in Money, so likewise I shall give a few Examples in

in Division of Money; whereby may be seen how expeditiously some Things may be done, without having Recourse to Reduction, the Rule of Three, &c. viz.

Example. Divide 26l. 12s. 6d. equally among 5 Men.

For Disposition of Working, set it down as follows.

l. s. d.

5) 26 12 6 In the Working of this, I say, the 5's
 ——— in 26, 5 Times; 5 Times 5 is 25, from
 5 06 6 26 and there remains 1, or 1l. or 20s.

5 which, with the 12s. in the Place of Shil-
 ——— lings makes 32s. then the 5's in 32, 6
 Proof 26 12 6 Times; 6 Times 5 is 30, from 32, and
 ——— there remains 2s. or 24d. which, with the

6d. in the Place of Pence makes 30; then the 5's in 30, 6
 Times; and so the Work is done; and the Answer is, that
 each Man must have 5l. 6s. 6d. for his equal Share in the
 said Division of 26l. 12s. 6d. amongst 5 Persons; and the
 Truth of it is proved by Multiplication of Money, suffici-
 ently shewn in the Rule of Multiplication; as here, 5 Times
 6 is 30, 6 and carry 2; and 5 Times 6 is 30, and 2 is 32,
 12 and carry 1; and 5 Times 5 is 25, and 1 is 26, &c.

Example. Divide the Charges of a Country Feast, amount-
 ing to 246l. 23s. 4d. equally amongst 12 Stewards, to know
 what each Steward must pay.

l. s. d.

12) 246 13 4

Answer 20 11 1 $\frac{4}{12}$

Here, I say, the 12's in 24,
 twice, and the 12's in 6,
 0 Times, and there remains
 6l. or 120s. and 13s. makes

133; then the 12's in 13 once, and the 12's in 13 once,
 and there remains 1s. or 12d. then 12 and 4 is 16; the 12's
 in 16 once, and 4 remains; so that each Steward must pay
 20l. 11s. 4d. $\frac{4}{12}$, or four Twelfths of a Penny, something
 more than a Farthing; and this may be proved as that
 above.

When any Quantity is such a Number, that any two Di-
 gits of the Multiplication Table, multiplied together, make
 the said Quantity or Number, then the Quotient may be
 very expeditiously found at two Divisions, and sooner than
 at one. Example: Divide 7872 by 32. In this Example,
 the Digits, component Parts, or Ratio's, which multiplied

15

together,

178 *The YOUNG MAN's Companion.*

together, make the Divisor 32, are 4 and 8, or 8 and 4; for it matters not which of the Ratio's you divide by first; for both Divisions together give a true Answer and the same Quotient; as may be seen by the different Methods of the following Work.

$$\begin{array}{r} 4) 7872 \\ \hline \end{array}$$

$$\text{Or thus, } 8) 7872$$

$$\begin{array}{r} 8) 1968 \\ \hline \end{array}$$

$$\begin{array}{r} 4) 984 \\ \hline \end{array}$$

246 Quotient.

246 Quotient.

Here tho' the Operations are diverse, yet the Quotients are one and the same. Again, divide 44184 by 56.

Example.

$$\begin{array}{r} 7) 44184 \\ \hline \end{array}$$

$$\begin{array}{r} 8) 6312 \\ \hline \end{array}$$

789 Quotient.

Here the Divisors are 7 and 8, or 8 and 7; for either or both, will give the same Quotient.

And thus may above forty Examples be wrought by Numbers out of the Multiplication Table, with great Dispatch and Expedition, as by 15, 18, 25, 35, 64, 72, 96, &c.

When it happens there is any Remainder in the first Division, or the last, or in both; to know the true Remainder as if you divided by the common Way, take this Method, *viz.* multiply the first Divisor by the last Remainder, and take in or add the first Remainder, if there be any, and the Product will be the true or same Remainder as if you divided by the long Way.

Example. Divide 4567 by 15.

Here I multiply 3, the first Divisor, by 2, the last Remainder, and take in 1, the first Remainder, and it makes 7 for the true Remainder, as may be proved at Leisure, by the other Way.

$$\begin{array}{r} 3) 4567 \\ \hline \end{array}$$

$$\begin{array}{r} 5) 1552 \\ \hline \end{array}$$

304

7

The

The same Observation and Method must be taken with Respect to component Parts mentioned before, in Division of Money, as in Division of single Numbers.

3) l. s. d.
Example. Divide 463 12 06 into 18 equal Parts.

6) 154 10 10

Answer 25 15 10 $\frac{1}{2}$

By this Method of Division of Money (if the Quantity be, as aforesaid, made by even component Parts) you may, by having the Price of several Things, know the Price or Value of one Thing, at the said Rate, as well as by the Rule of Three: So doth Multiplication of Money answer Questions in the Rule of Three, when the first Number is a Unit or One.

Example by Division.

7) l. s. d.
If 84lb of Coffee cost 31 10 0 what is that a lb?

12) 4 10 0

Answer 0 07 6 a Pound.

As in Multiplication of Money, to have an Answer you multiply the Price by the Quantity; so in Division of Money, you divide the Price by the Quantity, to have your Answer.

And so much at present for Multiplication and Division, the various and excellent Uses of which will be better understood in the following Rules of Arithmetick, particularly in the next Rule, called, Reduction.

REDUCTION.

REDUCTION is wrought by the foregoing Rules of Multiplication and Division.

For any greater Number or Name is turned into a lesser by Multiplication, by multiplying by so many of the lesser, as makes one of the greater.

For if you multiply Pounds in Money by 20, the Product

180 *The YOUNG MAN's Companion.*

duct is Shillings : Or Shillings by 12, the Product is Pence : Or Pence by 4, the Product is Farthings.

Any lesser Number or Name is turned into a greater by Division, by dividing the lesser Name given by so many of the said lesser Name, as makes one of the greater Name required.

For, if you divide any Number of Farthings by 4, the Quotient shews the Pence ; or Pence divided by 12, shew Shillings in the Quotient ; and Shillings divided by 20, give in the Quotient Pounds in Money.

In 896l. how many Shillings, Pence, and Farthings ?

$$\begin{array}{r}
 \text{l.} \\
 896 \\
 20 \\
 \hline
 \text{Shillings} \quad 17920 \\
 12 \\
 \hline
 35840 \\
 17920 \\
 \hline
 \text{Pence} \quad 215040 \\
 4 \\
 \hline
 \text{Farthings} \quad 860160
 \end{array}$$

How many Shillings, Pence, and Farthings are in

$$\begin{array}{r}
 \text{l.} \quad \text{s.} \quad \text{d.} \\
 163 \quad 13 \quad 8 \\
 20 \\
 \hline
 \text{Shillings} \quad 3273 \\
 12 \\
 \hline
 6554 \\
 3273 \\
 \hline
 \text{Pence} \quad 39284 \\
 4 \\
 \hline
 \text{Farthings} \quad 157136
 \end{array}$$

In 860160 Farthings, How many Pence, Shillings, and Pounds ?

$$\begin{array}{r}
 4) 860160 \quad (215040d. \\
 8 \\
 \hline
 06 \\
 4 \\
 \hline
 20 \\
 20 \\
 \hline
 016 \\
 16 \\
 \hline
 0 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 12) 215040 \quad (17920s. \\
 12 \\
 \hline
 95 \\
 84 \\
 \hline
 110 \\
 108 \\
 \hline
 24 \\
 24 \\
 \hline
 0 \\
 \hline
 \end{array}$$

First,

210) 179210 (896
16

First, According to the Rule before, I am to multiply the 163*l.* by 20, then set the Cypher 0 under the Line; but instead of that, I set 3 of the 13*s.* Next, 2 Times 3 is 6, and the 1 belonging to the 13, make 7, &c. and multiplying the Shillings by 12, I add the 8*d.*

19
18
12
12
0

Note, That an Hundred Weight is 112 Pounds: How many Pounds is there in five Hundred and three Quarters?

In 5C. 3 qrs. How many Pounds Weight?

4

23

28 a Quarter of a C. is 28lb. or Tod.

184

46

644 Pound.

Case.] When a Number of one Denomination is given to be reduced into a lesser Denomination.

Rule.] Multiply the given Number by so many Units of the inferior Denomination into which you would have the Number given reduced, as are contained in a Unit of the Denomination which is given, and the Product is the Answer.

Example. In 476 Pounds, how many Farthings?

476 Pounds.

960 the Farthings in a Pound.

28560
4284

456960 Farthings for Answer.

Example.

182 *The YOUNG MAN'S Companion.*

Example. In 87 Hundred Weight, how many Pounds?
 87 Hundred.
 112 Pounds in one Hundred.

174
 87
 87

9744 Pounds for Answer.

Example. In 527 Ells Flemish, how many Quarters of a Yard, each Ell being three Quarters of a Yard?

527 Ells.
 3 Quarters of a Yard in an Ell Flemish!

1581 Quarters of a Yard for Answer.

Example. In 328 Bales of Dowlas, how many Pieces?

328 Bales.
 3 Pieces in a Bale.

984 Pieces for Answer.

Example. In 484 Gros of Tape, each Gros 12 Dozen, each Dozen 2 Pieces, and each Piece 36 Yards, how many Yards?

484 Gros.
 12 Dozen in a Gros.

968
 484

5808 Dozens in 484 Gros } Multiply
 72 Yards in a Dozen.

12616
 40656

418176 Yards for Answer.

Cafe.]

The YOUNG MAN'S Companion. 183

Case.] When it is required to reduce Numbers of divers Denominations into the lowest Denomination.

Rule.] Work as in the last *Case*; but if you have any Number of the next inferior Denomination to that you are reducing, add such Number to the Product,

Example. In 36*l.* 5*s.* 5*d.* how many Pence?

36*l.* 5*s.* 5*d.* Multiply and add the 5*s.*
20 the Shillings in a Pound.

7285 Shillings in 36*l.* 5*s.* } Multiply and
12 Pence in a Shilling. } add the 5*d.*

14575

7285

17425 Pence in 36*l.* 5*s.* 5*d.* for Answer.

In the last Example in reducing the Pounds, say, 2 Times 4 in the Pounds is 8, but 5 (in the Shillings) is 5 Shillings; then say, 2 Times 4 is 8, &c. And, when you come to the Shillings, 2 Times 5*s.* is 10, and 5 in the Pence Place is 15*d.* put down 5 and carry 1, &c. *Note.* That if you add any Thing in the Ten's Place, either in the Shillings, Pence, &c. you must add them when you multiply by the Figure in the Ten's Place of the Multiplier.

Example. In 48*l.* 17*s.* 11*d.* 2*q.* how many Farthings?

l. *s.* *d.* *q.*

48 17 11 2 Multiply and add the 17*s.*
20 the Shillings in a Pound.

977 Shillings in 48*l.* 17*s.* } Multiply, adding
12 Pence in a Shilling. } the 11*d.*

1955

978

11735 Pence in 48*l.* 17*s.* 11*d.* } Multiply and add
4 Farthings in a Penny. } the 2*q.*

46942 Farthings in 48*l.* 17*s.* 11*d.* 2*q.* for Answer.

Example.

Example. In 47 C. 2 qrs. 24 lb. how many Pounds?

C. qr. lb.

47 2 24

4 Quarters in 112 lb.

} Multiply and add
the 2 qrs.

190 Quarters in 47 C. 2 qrs.

28 Pounds in 1 Q. of a C.

} Multiply and add
the 24 lb.

1524

382

5344 Pounds is 47 C. 2 qrs. 24 lb. for Answer.

This Question is more briefly resolved, as in the Margin, by first putting down your 47 C. 4 Times, and the 2 Q. 24 lb. which is 80 lb. in Tens and Units Place, so the Sum is the Answer.

47 C. 2 qrs. 24 lb

47

470

478

5344 lb. for Answer.

Reduction ASCENDING

Is, when Numbers are reduced or changed from a lesser into a greater Denomination.

Case 1.] When the Number is given to be reduced to the next superior Denomination.

Rule.] Divide the said given Number by such a Number of Units of the Denomination given, as makes a Unit of the next superior Denomination, and the Quotient is the Answer.

Example. In 984 Pieces of Dowls, how many Bales, each 3 Pieces? See the Operation.

3) 984 (328 Bales for Answer.

9

8

6

24

24

0

Example.

Example. In 9744 Pounds, how many Hundreds?

112) 9744 (87 Hundreds for Answer.

896

—

784

784

—

0

—

Case 2.] When a Number is to be reduced to a Denomination higher than the next superior Denomination.

Rule.] Divide the given Number, as before, by such a Number of Units of the Denomination given, as makes a Unit of the next higher Denomination, and note the Remainder. Then divide that Quotient by so many Units of that Name or Denomination which it is of, as makes a Unit of the next higher Denomination to the said Quotient, &c. noting the Remainders, as in the Example following.

Example. In 87425 Pence, how many Shillings and Pounds?

	d.	s.	l.
12) 87425	(72815-	(364	
...	210) ...		
—	—	—	
34	12		
—	—		
102	8	Answer 364l. 5s. 5d.	
—	—		
65	05s. Remains.		
—	—		
	5d. Remains.		

Example. In 5344lb. how many Quarters and Hundreds?

	lb.	Q.	C.
28) 5344	(190	(47	
...	4) ..		
—	—		
254	30		
—	—		
Rem. (lb. 24	2 Quarters remains.		
—	—	Answer 47C. 2Q. 24lb.	

Example.

186 *The YOUNG MAN's Companion.*

Example. In 418175 Yards, how many Grofs of Tape?

Divide the given Number by 72, and that Quotient by 12, for Answer; because 72 Yards is 1 Dozen, and 12 Dozen 1 Grofs.

Yards	Dozens	
72) 418175	(5808	(484 Grofs for Answer.
....	12)	
581	100	
576	48	
o Rem.	o Rem.	

These Questions are the Converse of those in Reduction Descending, and may serve for the Proof of them; and likewise to shew the Learner the Nature and Effects of the Rules.

Reduction Ascending and Descending

Are such Questions as are performed by Multiplication and Division, as are these that follow; and such like.

Example. In 874 Ells Flemish, how many Ells English?

Multiply the given Number by 3, and divide the Product by 5, and the Quotient is the Answer.

874 Ells <i>Flemish</i>	
3 Quarters of a Yard in 1 Ell	Multiply
5) 2622	524 $\frac{2}{3}$ Ells <i>English</i> for Answer.
12	874
22	6
	Answer 534 $\frac{4}{10}$ or $\frac{2}{3}$

2 Rem. which, placed over the Divisor, is $\frac{2}{3}$.

Or multiply by 6, and divide by 10; which is shorter.

Note, That the Remainder is always of the same Denomination with the Dividend.

Example. In 46 C. of Cotton-Wooll, how many Pounds, and what the Price at 15 d. a Pound?

Answer 322 l.

46 C.

The YOUNG MAN's Companion. 187

	d.	s.	l.
46C.	12)	77280	(64410
46	00		
46	—	—	210
5152 Pound.	52	4	
15 Pence for 1 Pound	48	4	
25760	Remains 0	0	Remains.
5152	—	—	

77280 Pence for Answer; which reduce into Pounds as before taught, and per Margin.

Example. In 846 Dollars, each 4s. 6d. how many Pounds Sterling?

846 Dollars } Multiply
54 Pence per Dollar

3384

4230

12)	45684d.	210)	38017	(1907
....				
960	00	18	00	00
840	00	07	Remains.	
0	Remains.			

Example. To reduce Flemish Money into English.

In 465 l. 13s. 4d. Flemish, how many Pounds Sterling, at 23s. 4d. Flemish, for 1 Pound Sterling? Answer, 279l. 8s. Sterling.

Rule.] Divide the Pence in 465 l. 13s. 4d. by the Pence in 33s. 4d. and the Quotient is the Answer. See the Work.

<i>s. d.</i>	<i>l. s. d.</i>
44 4	465 13 4
12	20
400	93 13 Shill. <i>Flem.</i>
	12

4|00) 1117|60 (279*l.* Sterl.

31

37

160*l.* Sterl. re.

20

4|00) 32|00 (8*s.* Sterl.

0

Thus you may reduce *Flemish* Money into *English*, let the Price of a Pound Sterling be reckoned any other Number of Shillings, or Shillings and Pence *Flemish*; but when the Price is as above, (which is the true Value) you may perform the same by multiplying the given Number by 3, and dividing the Product by 5; for 400 *Flemish* Pence is to 240 Sterling Pence, as 5 is to 3.

<i>l. s. d.</i>	<i>Flemish.</i>
465 13 4	3
5) 1397 00 0	
279 08 0	Answer.

Note, That *French* Livers, Soulze and Deniers, are reduc'd into Deniers (or Pence) as the *English* and *Dutch* Money is, by multiplying by 20 and 12.

Example. In 364 *French* Crowns, each 54*d.* $\frac{1}{4}$ Sterling, how many Pounds, Shillings, and Pence, Sterling?

Rule.] Multiply the given Crowns by 54*d.* and the Product 19656*d.* to which add $\frac{1}{4}$ of 364 for the Farthing, and the Sum is 19747*d.* or 82*l.* 5*s.* 7*d.* Sterling for Answer. But you will find a briefer Way of performing these and such-like Questions by the Rules of Practice, which will be of great Use in casting up Bills of Exchange.

Example.

Example. In 1500 Pieces of Eight Mexico, each 52d. $\frac{3}{4}$ Sterling, how many Pounds Sterling?

Rule.] Multiply the 1500 by 52, and the Product is 78000 Pence, then for the $\frac{3}{4}$ multiply the 1500 by 3, and divide the Product by 8, and the Quotient is 562d. $\frac{1}{2}$ which add to the 78000d. and you have the Answer 78562d. $\frac{1}{2}$ Sterling, or 327l. 6s. 10d. $\frac{1}{2}$. And this Rule is very useful in casting up Bills of Exchange to Cadix, Leghorn, and Genoa; but may be something more briefly performed, as may all the rest, by Decimals, or the Rules of Practice.

Example. In 2900 Ducats, each 51d. $\frac{7}{8}$ Sterling, how many Pounds, Shillings, and Pence Sterling?

Rule.] Multiply 2900 by 51, and the Product is 147900: Then multiply 2900 by 7, and divide the Product by 8, and the Quotient is 2537d. $\frac{1}{2}$, which added to the 147900, the Sum is 150437d. $\frac{1}{2}$ Sterling, or 626l. 16s. 5d. $\frac{1}{2}$. This Example you will find useful in casting up Exchanges to Venice.

Example. In 2000 Millrees, each 6s. 8d. $\frac{1}{2}$, how many Pounds Sterling?

Rule.] Divide 2000 by 3, (because 3 6s. 8d. make 1 Pound Sterling) and the Quotient is Pounds; to which add the Pounds in 2000 Half-pence, as 4l. 3s. 4d. to 666l. 13s. 4d. and the Sum is 670l. 16s. 8d. for Answer; which Rule is useful in casting up Bills of Exchange from Oporto, or Lisbon in Portugal. But if the Price of a Millree, in the Course of Exchange, be reckoned any other Number of Shillings and Pence, you may work either by the Rules of Practice following, or reduce the Value of a Millree into its lowest Denomination, and reduce the Product of the Millrees thereby into Pounds.

More promiscuous Examples of both Kinds of Reduction, one proving the other.

In 276l. 12s. how many Pence?

20

12)

In 66384d. how many Pounds?

5322

12

210) 553 2

Answer 66384d.

Answer. L. 276 12

In

In 47964 Grains, how many Pounds Troy?

$$\begin{array}{r}
 24) 47964 \text{ (199) } 8 \\
 \underline{24 \dots} \quad 12) 99 - 18 \text{ pw.} \\
 239 \quad \underline{\hspace{1cm}} \\
 216 \quad \underline{\hspace{1cm}} \quad 8 \text{ lb. } 3 \text{ oz.} \\
 \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \quad \text{lb. oz. pw. gr.} \\
 204 \quad \text{In } 8 \quad 3 \quad 18 \quad 12 \text{ how many Grains?} \\
 192 \quad \underline{\hspace{1cm}} \quad 12 \quad \text{Answer } 47964 \text{ Grains.} \\
 \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \\
 236 \quad \underline{\hspace{1cm}} \quad 99 \\
 216 \quad \underline{\hspace{1cm}} \quad 20 \\
 \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \\
 \text{Grains } 12 \quad \underline{\hspace{1cm}} \quad 1988 \\
 \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \quad 24 \\
 \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \\
 7994 \\
 3997
 \end{array}$$

Answer 47964 and Proof.

In 34C. $\frac{3}{4}$ of Cotton-Wool, how many Pounds?

$$\begin{array}{r}
 \text{C.} \qquad \qquad \qquad \text{C.} \\
 34 \quad \quad \quad 112) 3892 \text{ (34 } \frac{3}{4} \text{ Proof.} \\
 34 \quad \quad \quad \underline{\hspace{1cm}} \quad 336 \\
 34 \quad \quad \quad \underline{\hspace{1cm}} \\
 34 \mid 84 \quad \quad \quad \underline{\hspace{1cm}} \quad 532 \\
 \underline{\hspace{1cm}} \quad \quad \quad \underline{\hspace{1cm}} \quad 448 \\
 3892 \quad \quad \quad \underline{\hspace{1cm}} \\
 \quad \quad \quad \underline{\hspace{1cm}} \quad 84 \text{ lb. or } \frac{3}{4} \text{ of a C.}
 \end{array}$$

In 456C. 3qrs. 27lb. of Copper, how many Pounds? And what it comes to, at 21d. per lb.

C.
456
456
456
456
111
51183
21
5118
102366
107484
will am
Mul
makes

C.
456
456
456
456
111
51183 Pounds at
21d. per lb.

51183
102366

1074843 Pence; which bring into Pounds by Division,
or Reduction Ascending, as before shewn, and it
will amount to 4478l. 10s. 3d.

Bring 4796 Ells Flemish into Ells English.

Multiply by 3, and divide by 5; because 3 Quarters
makes an Ell *Flemish*, and 5 an Ell *English*.

4796
3
5) 14388
2877 $\frac{2}{3}$

Reduce 546 Ells English into Yards.

Multiply by 5, and divide by 4, thus,

456 *English* Ells,
5 qrs. 1 E. Ell.

In 570 Yards how many Ells,
English?

4) 2280 Quarters

570

4 Qrs. in a Yard.

Yards 570 Answer.

5) 2280
Eng. Ells 456 Answer and Proof.

Bring

Bring 130 Tuns of Wine into Gallons.
4 Hhds 1 Tun.

	<i>Or thus,</i>
<u>520</u>	252 Gall. 1 Tun.
63 Gallons 1 Hhd.	130 Tuns.
<u>1560</u>	<u>7560</u>
3120	252
<u>Answer 32760 Gallons</u>	<u>32760</u>

And so on the contrary by *Division*.

Lasts, Qrs. Bushels, Pecks.

Reduce 42 3 5 2 into Pecks.
10 Qrs. 1 Last.

423 Qrs. Here I multiply by 19,
8 Bushels 1 Qr. and take in 3 Qrs. and
then by 8, and take in 5
Bushels; and, lastly, by 4,
and take in 2 Pecks
3389
4 Pecks 1 Bush.

13558 Pecks, in 42 Lasts, 3 Quarters, 5 Bushels
and two Pecks.

4)
In 13558 Pecks, how many Lasts, &c.

8) 3389-2 Pecks taken in.

110) 42|3-5 Bushels taken in.

Lasts 42-3 Quarters taken in.

Answer, 42 Lasts, 3 Quarters, 5 Bushels, 2 Pecks.

Thus, by the two foregoing Examples it is seen, that Reduction Ascending and Descending mutually prove each other, as was said before; and is no more than Multiplication and Division proving one another.

By Reduction also foreign Coins or Exchanges may be reduced into Sterling Money; and, on the contrary, Sterling-Money to Foreign.

Example.

The YOUNG MAN'S Companion. 193

Example. Reduce 246 Venetian Ducats de Banco into Sterling Money, the Exchange at 52d. Sterling per Ducat,

$$\begin{array}{r} 246 \\ 52 \\ \hline 492 \\ 1230 \end{array}$$

$$12) 12792$$

$$2|0) 106|6$$

53l. 6s. To be paid in London for the 246 Ducats drawn in Venice.

Reduce 53l. 6s. Sterling into Ducats at 52d. Sterling per Ducat.

$$\begin{array}{r} 20 \\ \hline 1066 \\ 12 \end{array}$$

52) 12792 (246 Ducats to be paid in Venice for the 53l. 6s. drawn in London.

$$104$$

$$23 \text{ } \text{£} \text{ } s.$$

To reduce Flemish Money into Sterling Money, divide the Pence Flemish by the Par of Exchange, viz. 33s. 4d. and the Quotient will be the Sterling Money; and what remains multiply by 20, &c.

Example. In 242l. 13s. 4d. Flemish, how many Pounds Sterling, &c

$$\begin{array}{r} 33s. 4d. \text{ Flemish} \\ 12 \\ \hline 4853 \\ 12 \end{array}$$

$$\begin{array}{r} 400 \\ \hline 4|00) 582|40 \end{array}$$

£. 145 Sterl.

$$\begin{array}{r} \text{Remains } 240 \\ 20 \end{array}$$

$$4|00) 48|00$$

12 Shillings Sterling.

K

By

194 *The YOUNG MAN's Companion.*

By the Work it appears, that 145*l.* 12*s.* Sterling, answers, or is equivalent to 242*l.* 13*s.* 4*d.* Flemish, at 33*s.* 4*d.* Flemish per Pound Sterling.

Thus *Flemish* Money may be reduced to Sterling Money, though the *Par* of Exchange be at any other Rate of Shillings and Pence *Flemish*: But when at the Rate as above, viz. 33*s.* 4*d.* (the common *Par*) then the Answer is sooner found by multiplying by 3, and dividing by 5; for 400*d.* *Flemish* is the same to 240*d.* Sterling (each being a Pound) as 3 is to 5; for if you divide 240 by 3, it quotes 80; so 400 divided by 5, quotes the same.

The foregoing Example done by the last proposed Way.

$$\begin{array}{r}
 \text{L. } 240 \quad 13 \quad 4 \text{ Flemish.} \\
 \quad \quad \quad 3 \\
 \hline
 5) \quad 722 \quad 00 \quad 0 \\
 \hline
 \text{L. } 144 \quad 08 \quad 0 \text{ Sterling.}
 \end{array}$$

Note, *French* Money is reduced to Sterling, viz. *Livres*, *Soulze*, and *Deniers* (or *French* Pence) as Sterling and *Flemish* Money is, by multiplying by 20 and by 12.

In 426 *French* Crowns, each 54*d.* $\frac{1}{4}$ Sterling, how many Pounds, &c. Sterling?

$$\begin{array}{r}
 \text{F. C.} \\
 426 \\
 54 \\
 \hline
 1704 \\
 2130 \\
 106 \frac{2}{4} \text{ or } \frac{1}{2} d.
 \end{array}$$

$$12) 23110 \text{ 10d.}$$

And this 20) 192|5
1925 divided ———
by 20 makes Ans. *l.* 96 5 10 $\frac{1}{2}$ S.

In this Example, the Number of Crowns is multiplied by 54*d.* and for that I take the 4th Part of 426, which is 106 $\frac{2}{4}$ of a Penny, or a Half-penny; which added to the other Pence, gives for Total 23110*d.* which divided by 12, quotes 1925, and 10*d.* remains; the Answer to be 96*l.* 5*s.* 10*d.* $\frac{1}{2}$ Sterling: As in the Work.

Again, Bring 1600 Pieces of Eight Mexico, at 54 $\frac{2}{3}$ *d.* Sterling, into Pounds, &c. Sterling.

1600

$$\begin{array}{r}
 1600 \\
 54 \\
 \hline
 6400 \\
 8000 \\
 200 \\
 200 \\
 \hline
 12) 86800d.
 \end{array}$$

$$2|0) 723|3 \ 4$$

$$L. 361 \ 13 \ 4$$

Here the 16 Pieces of Eight are multiplied by 54, to bring them into Pence; and for the $\frac{2}{3}$ I take the $\frac{2}{3}$ of 1600 twice, &c. as in the Work. And the Answer is L. 361 13 4

This Method is of Use in reducing the Exchanges of Cadiz, Leghorn, and Genoa. Or when the Exchange is at so many Pence, and Eighthths of a Penny, (as often the Exchanges run) then multiply the given Number to reduce it into Pence, by the Pence contained in a Piece of Eight; and also multiply the said given Number apart, by the Numerator or upper Figure of the Fraction, and divide by the Denominator or under Figure of the Fraction, and the Quotient will be Pence; which add to the other Pence produced by multiplying the given Numbers by the Pence contained in one of the Pieces for Exchange; then divide the Total Pence by 12, &c.

Example. Bring 296 Dollars, at 52d. $\frac{6}{8}$ Sterling, into Pounds, &c. Sterling.

$$\begin{array}{r}
 296 \text{ Dollars.} \\
 52 \\
 \hline
 592 \\
 1480 \\
 \hline
 15392 \\
 222 \\
 \hline
 12) 15614
 \end{array}$$

$$2|10) 130|1 \ 2$$

$$\begin{array}{r}
 \text{Dollars.} \\
 296 \\
 6 \\
 \hline
 8) 1776 \\
 \hline
 222 \text{ Pence.}
 \end{array}$$

Answer L. 65 1 2 Sterling Money due for 296 Dollars, at 52d. $\frac{6}{8}$ Sterling per Dollar.

K 2

But

But Ducats, Dollars, Crowns, Milrees, &c. are more expeditiously cast up, by the Rules of Practice hereafter to be shown.

And so much for Reduction.

The GOLDEN RULE, or Rule of Three Direct,

IS so called from its extraordinary Usefulness, not only in Arithmetical Questions, but in all Parts of the Mathematicks.

It is also called *The Rule of Three*, because there are always three Numbers given to find out a fourth. And it is properly called *The Rule of Proportion*, because the first Number bears such Proportion to the second, as the third does to the fourth.

The Design of this Rule is, to show how to find a fourth Proportionable Number, by having three given Numbers, which is deducible from the *sixteenth Proposit. of the sixth Book of Euclid's Elements*.

The Rule is,

Multiply the second and third Numbers together, and divide the Product by the first Number, and the Quotient thence arising is the fourth Number sought. Or,

Divide the second Number by the first, and multiply the Quotient by the third, and the Product is the Number required: For the fourth Number contains the third, so often as the second contains the first. And this is called *Direct Proportion*.

All Questions in this *Rule of Three* consist of three Numbers, whereof two are always of one Kind or Denomination. As in this Example:

If I give 10s. for 5 Yards, what shall I give for 15 Yards at the same Rate?

Now two of these are of the same Kind, that is, the Number of 5 and 15, which are both Yards, which place thus. The Number, concerning which the Question is ask'd, must be in the third Place.

Now in this Question the 15 Yards is the Number, and the Price of which the Question requires the Value; place it therefore in the third Place.

Then

Then seek out the other Number of the same Kind or Denomination, which must be Yards also, which in this Question is 5; set this in the first Place, and then the other Number (that is 10s.) will consequently claim the second Place, and the Answer to the Question will be always of the same Denomination with it, which here is, Shillings.

Now the Question stated, according to the foregoing Rules, stands thus.

If 5 Yards cost 10s. what will 15 Yards cost?

$$\begin{array}{r}
 15 \\
 \hline
 5) 150 \text{ (30} \\
 \underline{15} \\
 00
 \end{array}$$

Multiply the second Number by the third, and divide the Product by the first.

Note, That the three Numbers are 5, 10, 15.

Proof of the last Question.

What shall I pay for 5 Yards, when 15 Yards are sold for 30 Shillings.

If 15 Yards cost 30s. what will 5 Yards cost?

$$\begin{array}{r}
 5 \\
 \hline
 15) 150 \text{ (10s. Answer.} \\
 \underline{15} \\
 00
 \end{array}$$

What is the Interest of 75 Pounds at the Rate of 8 Pounds per Cent. per Annum?

The Number will be stated thus:

L. P.	E. I.	L. P.
100	8	75

In this Example there are two Numbers that are Principal

K 3

cial Money, and one that is Interest; therefore the Interest (according to the Rule) must stand in the Middle, or second Place; the Principal on which the Interest dependeth, viz. 100 (8l. being the Interest thereof) must stand in the first Place towards the Left-hand, and the other Principal on which the fourth Number (which is the Number sought for) dependeth, must possess the first Place towards the Right-hand.

By these Rules foregoing, you may with Ease and Certainty perform any Operation in direct Proportion; and for your further Information take the Examples following.

Example. If the Interest of 100l. for one Year be 8l. what is the Interest of 73l. for the same Time?

L. P.	L. I.	L. P.
100	8	75
		8

1100 6100 (6l. for Answer.

Example. If 32 Rundlets of Brandy cost 96l. what will 4 Rundlets cost at that Rate?

Rund.	l.	Rund.
32	96	4
	4	

32) 384 (12l. Answer.

64

0 Remains.

Example. If 12 Bags of Cotton-Wool cost 184l. what will 17 Bags cost?

Bags

Bags	L.	Bags	
12	184	17	
	17		l. s. d.
			260 13 4 Answer.
	1288		
	184		

12) 3128 (260l.

72

8 Pounds remain.
20 Shillings multiply.

12) 160 (13 Shillings.

40

4 Shillings remain.
12 Pence multiply.

12) 48 (4 Pence.

0 Remains.

Note, That as in the last Example, when any Thing remains that is reducible to a lower Denomination, after it is so reduced, it must be divided continually by the first Number.

Case.] When any of the three Numbers given happen to be of divers Denominations.

Rule.] You may reduce them into the lowest Denomination. And if your first Number require to be reduced, your third must be reduced likewise into the same Denomination as the first: For the first and third Number, before you begin your Operation, must be always of one Name or Denomination.

Example. If 17 Hogheads of Sugar cost 320l. 12s. what will 5 of these Hogheads be worth?

K 4

Hhds

Hbds l. s. Hbds
 17 320 12 5
 20

6412 Shillings }
 5 Hbds } Multiply.

17) 32060 (18815 (94 5 10 2 6
 210)

150 8

146 0 Remains.

100

15 Shillings remain. }
 12 Pence in a Shilling. } Multiply.

30

15

17) 180 (10 Pence
 10 Pence remain.
 4 Farthings in a Penny. } Multiply,

17) 40 (2 Farthings.

6 Farthings remain to be divided by 17.

Note, That when you have multiplied the second and third Numbers together, and divided the Product by the first, the Quotient is of the same Denomination as the second Number is, after you have reduced it (as in the last Example) into its lowest Denomination given.

Example. If 4C. 1qr. 24lb. of Sugar cost 14l. what will 18C. cost?

C. qr. lb. C.

40 1 24 14 18

4 1 18

42 18

45 18

500 lb. of Sugar

2106 lb. of Sugar.

14^l. Sterling.

8064

2016

5[00) 282|24 (56

32

32

224 Pounds remains.

20 Shillings in 1^l.

5[00) 44|80 (8 Shillings.

480 Shillings remains.

12 Pence in 1^s.

5[00) 57|60 (11 Pence.

260 Pence remains.

4 Farthings in 1^d.

5[00) 10|40 (2 Qrs.

40 Farthings remain to be divided

by 500.

Note farther, That what Farthings remain to be divided

K 5

by

by

by

by

by

by

by

by

by

by

by

by

by

by

by

by

by

202 *The YOUNG MAN'S Companion.*

by the common Divisor, (as in the last Example) because you can reduce them into no lower Denomination; you may place them over your Divisor, as Fractions of a Farthing, which shall be explained when we come to Vulgar Fractions, &c.

Case.] When the first Number of the three given, is but a Unit, the Operation is performed by Multiplication only.

Example. If I give 15s. for a Pound of Thread, what will 250lb. cost me at that Rate?

lb.	s.	lb.
1	15	250
		15
		1250
		250

3750 Shillings Answer, or 187l. 10s

Example. At 14l. 10s. 6d. per Bag of Hops, what cost 55 Bags?

Bag	l.	s.	d.	Bags
1	14	10	6	55
			20	

290 Shillings

12

3486 Pence

55 the 3d Number. } Multiply.

17430

17430

191730 Pence Answ. or 798l. 17s. 6d.

Case.] When the third Number of the three given (or that towards the Right-hand) is a Unit; such Operation is performed by Division only; if the Number need no reducing.

Example. If 40 Pieces of Broad Cloth cost 590l. what will 1 Piece cost?

Pieces

Pieces. L . Piece
 40 590 1
 410 5910 ($14\frac{3}{4}$ L . or 14L . 15s .
 Answer.

19

30 Pounds remain.

Example. If 14 Hogheads of Tobacco; poise Net 9285 lb.
 cost 619l. 10s. what will 1 Pound cost at that Rate?

lb.	L	s .	lb.	s .	d .	q .
9285	619	10	1	Answer	1	4 0 $\frac{480}{9285}$
20						

9285) 12390s. (1 Shilling.

3105 Shillings remain.

12

9285) 37260d. (4 Pence.

120 Pence remains.

4

480 Farthings remain to divide by 9285.

If one Bushel of Rye cost 3s. 6d. what will a Last, or 10 Quarters cost after that Rate?

First reduce the 3s. 6d. into Pence, that is 42d. and the 10 Quarters into Bushels, that is 80, and set the Question thus.

If 1 Bushel cost 42d. what will 80 Bushels cost?

80.

3360

The first Number (or Place being 1) will neither multiply nor divide, then bring the 3360d. into Shillings by dividing by 12, as following.

204 *The YOUNG MAN's Companion.*

12)	3360	(280 Shillings.	2 0)	28 0	(14
24				2	
	96			08	
	96			8	
	0	14/.		0	
		20.			

For the Proof of this, and the like Questions, reduce the Answer into Pence, to know whether your Work be right, as appears in the Work.

If a Chaldron of Coals (that is, 36 Bushels) cost 22s. what will 1 Bushel cost?

Reduce the 22s. into Pence, by Reduction, which makes 264d. which divide by 36 thus,

Now the Remainder 12 being the third Part of the Divisor 36, shews the Part of a Penny, to be $\frac{1}{3}$, so that a Bushel at 22s. a Chaldron, will cost 7d. and a third Part of a Penny.

If 112lb. of Tobacco cost 400d. what will 1lb. cost?

Divide the 400d. by the 112lb. Weight, and the Quotient gives 3d. the Pound, and the Remainder will be 64, which is somewhat above Half; the Divisor 112 shews that the $\frac{64}{112}$ Fraction is somewhat more than Half a Penny, to be added to the 3d. the Pound above.

If I paid 432l. for 525 Quarters of Malt, what is the Price of 1 Quarter after that Rate?

Which being stated stands thus:

If 525 Quarters cost 432l. what will 1 Quarter cost?

In this Question you cannot multiply the second Number by the third, because the third Number (or Place) is but one.

Therefore to perform this Question with Ease, reduce 432l. into Farthings by Reduction, which makes 414720 Farthings to be divided, which divide by 525, the Quarters of

of Malt; and the Quotient, the Answer, 789 Farthings; the Remainder after the Division is ended, are but the Parts of a Farthing.

Lastly, The 789 Farthings being reduced, are 16s. 5d. $\frac{1}{4}$ therefore, if 525 Quarters of Malt (or Tods of Wooll or Goods) be sold for 432l. one Quarter will cost 16s. 5d. $\frac{1}{4}$ after that Rate. Or which is better, reduce the 432l. into Shillings, and it gives 8640, which divide by 525, and the Quotient is 16, and the Remainder 240, which multiply by 12 the Product is 2880, which divide by 525 the Quotient is 5 Pence, and the Remainder 255; that multiplied by 4, and the Product 1020 divided as before, gives 1 Farthing, and $\frac{425}{525}$ Parts of another Farthing.

If a Grocer bought 5 C. $\frac{3}{4}$ Weight of Nutmegs, which cost him 163l. 13s. 8d. how may he sell 1lb. Weight without Gain or Loss?

Reduce the Money into Pence, it makes 39284d. for the Dividend, and 5 C. $\frac{3}{4}$ Weight into Pound Weight, by Reduction, makes 644 Pound Weight for the Divisor; then divide the 39284 by 644, and the Quotient gives 61 Pence, the Price of one Pound, viz. 5s. 1d.

Note, That what Sum of Money you desire to gain, add it to the Price, and work as above, to know what the Price of one Pound will be, so will you know what you get by every single Pound.

Suppose the yearly Rent of 20l. belenged to 7 Landlords.

Reduce the 20l. into Farthings, and they are 19200, which divide by 7, the Quotient gives 2742 Farthings $\frac{6}{7}$ for each Landlord, from which you may subtract the Taxes.

By the same Rule you may draw a Composition of Debts, for if a Man owe to several Creditors, as suppose it comes to in all 25l. 16s. reduce it into Farthings, and divide it by the Number of Pounds owing, &c. as,

Suppose a Man leaveth 13l. to pay his Debts, and he owes one Man 5l. the second 6l. and the third 7l. which makes 18l. what is each Man's Share?

	l.	s.	d.	q.
To the first	3	12	2	2
— Second	4	06	8	0
— Third	5	01	1	2
	13	00	0	0

If

206 *The YOUNG MAN's Companion.*

If 28 Quarters of Barley cost 30l. 10s. 6d. tell me what 84 Quarters come to at that Rate?

28 Quarters cost 30l. 10s. 6d. what will 84 Quarters cost?

	20		12
	<u> </u>	28)	615384 (21978 Pence.
Shillings	610		56
	<u> </u>		<u> </u>
	12		210) 18311-6
	<u> </u>		<u> </u>
	1226		55
	<u> </u>		28
	610		<u> </u>
	<u> </u>		<u> </u>
Pence	7326		273
	<u> </u>		252
	84		<u> </u>
	<u> </u>		218
	29304		196
	<u> </u>		<u> </u>
	36608		224
	<u> </u>		224
Sum	615384		<u> </u>
	<u> </u>		00

84 Quarters come to 91l. 11s. 6d.

For a Proof I reduce the 91l. 11s. 6d. into Pence.

20
<u> </u>
1831
<u> </u>
12
<u> </u>
3668
<u> </u>
1831
<u> </u>
21978

If 50l. 8s. be paid for 112 Yards, how much is that for 7 Yards?

Note, The 50l. 8s. being reduced into Shillings, the Question will stand thus:

If 112 Yards cost 1008s. what will 7 Yards cost?

	7
112)	7056 (63s. Answer.
	<u>672</u>
	336
	<u>336</u>
	0

The YOUNG MAN'S Companion. 207

If 3l. 3s. be paid for 7 Yards of Cloth, how many Yards shall I have for 25l. 4s.

If 63s. buy 7 Yards, what will 504s. buy?

63) 3528 (56 Yards Answer.

315

504

7

378

3528

378

0

If 2l. 14s. 3d. be paid for 3 Yards and an Half, what shall I pay for 27 Yards, and 3 Quarters?

Note, The 27 Yards and $\frac{3}{4}$ being reduced into Quarters, and the Money into Pence, it stands thus.

Quarters.

d.

Quarters.

14

651

111

111

651

651

651

72261

The Dividend, the first Number 14 being the Divisor.

7) 72261

2) 10323

12) 5161 $\frac{1}{2}$

210) 4310 $\frac{1}{2}$

Answer L. 21 10 1 $\frac{1}{2}$

How many Yards of Cloth shall I buy for 21l. 10s. 1d. $\frac{1}{2}$, when 3 Yards and an Half are sold for 2l. 14s. 3d.

First, Reduce the 2l. 14s. 3d. into Farthings, which make 2604, for the first Number; next, the 3 Yards and an Half into Quarters, which make 14 for the second Number,

208 *The YOUNG MAN's Companion.*

ber, and the 21l. 10s. 1d. $\frac{1}{2}$, and it makes 20646 Farthings; then multiply that by 14, and the Product is 289044, to be divided by 2604, and the Quotient gives 111 Quarters of Yards, to divide by 4, (the Quarters in a Yard) and the Quotient is 27 Yards $\frac{3}{4}$, viz. 3 Quarters, Answer.

Thus stated being reduced.

Farthings	Quarters	Farthings
2604	14	20646
		14

If one Pound of Iron cost 3 Pence Half-penny, what will

7C. 3qrs. 17lb. cost?

4

31 Quarters of Hundreds.

28 Pounds in a $\frac{1}{4}$ of an Hundred

Take in 17lb.

255

63

Pounds 885 in 7C. 3qrs. 17lb.
14 Farthings in 3d. $\frac{1}{2}$

3540

885

4) 12390 Farthings Answer.

12) 3097 $\frac{1}{2}$

2) 0 2518 $\frac{1}{2}$

Answer L. 12 18 1 $\frac{1}{2}$

Note, That this Example may serve for a Rule to reduce Hundreds, Quarters, and Pounds into Pounds: but most Tradesmen set the Weights in short, thus, 7—3—17 instead of setting them as above 7C. 3qrs. 17lb.

Besides, this Way of Proof, of reducing the Total to Farthings again, is most necessary for young Learners, in most of the Questions in the Rule of Three.

The

The single Rule of Indirect Proportion.

Whereas in the former Rule of Direct Proportion, the fourth Number was always proportionably greater or lesser than the Third, as the Second was greater or lesser than the First; but in this Kind of Proportion, 'tis just the contrary, for the greater the third Number is, the less is the Fourth, and the less the Third is, the greater is the Fourth; for which Reason, 'tis called Indirect or Reverse Proportion.

And whereas in the last Rule the Product of the First and Fourth is equal to that of the Second and Third; in the Proportion I am now treating of, the Product of the Third and Fourth is equal to that of the first and second Numbers; which may serve as a Proof to both.

The Method of stating any Question in this Proportion, is the same with the Direct Proportion; but to find the Number required this is the

Rule.] Multiply the first and second Numbers towards the Left-hand together, and divide the Product by the Third, and the Quotient arising is the Answer.

A Rule to know whether a Question proposed be to be answered by the Rule of Proportion, Direct or Indirect.

Having stated the three Numbers given, as is formerly directed, calling the middle Number the Mean, and the two outermost Numbers the Extrems: Consider from the Nature of the Question, whether the third Number requires more or less than the second Number; if it requires more, the lesser Extream is to be your Divisor; but if the Third requires less, the greater Extream is your Divisor. Now so often as this lesser, and the greater Extream happeneth to be the third Number, or that next the Right-hand, so often is your Proportion Indirect; but when they are the first Number, the Proportion is direct: An Example or two will make it plain.

Example. If a Board be 9 Inches broad, how much in Length will make a square Foot?

Say, if 12 Inches broad require 12 in Length to make a square Foot, what Length will 9 Inches broad require? It will require more Length, because there is less Breadth. See the Work.

In. br.

In. br. long In. br.

12 12 9
12

9) 144 (16 Inches in Length for Answer.

54

0

Example. How many Yards of Silk 3 Quarters broad, will line 9 Yards of Broad-Cloth, that is two Yards broad?

Say, if 6 Quarters wide require 9 Yards in Length, what will 3 Quarters wide require in Length?

Q. br. Y. long Q. br.

6 9 3
6

3) 54 (18 Yards in Length for Answer.

24

0

Example. If when the Price of a Bushel of Wheat is 6s. 3d. the Penny-loaf weigheth 9 Ounces, what must the Penny-loaf weigh, when the Price of a Bushel of the same Wheat is 4s. 6d? The Question is thus stated.

s. d.

oz.

s. d.

6 3

9

4 6

12

12

75 Pence

54 Pence your Divisor.

9

54) 675 (12 Ounces.

54) 540 (10 Penny Weights.

135

0

27 Ounces remain.

20 Penny-weights.

} Multiply

540

Answer

lb.

oz.

pw.

1

00

10

The

The double Rule of direct Proportion.

In this Kind of Proportion there are five Numbers given to find a Sixth, which Sixth will bear such Proportion to the Product made of the fourth and fifth Numbers, as the third Number does to the Product made of the first and second Numbers.

The Rule for stating the five Numbers given, is;

Make that the third Number, from the Left-hand; which is of the same Denomination with the Number sought; then place the two Numbers in the first and second Place to the Left-hand, which are conjunctive in the Sense of the Question to the Third, and the other two Numbers in such Order, that the Fourth may be of the same Denomination with the First, and the Fifth of the same with the Second: Which done,

Rule.] Divide the Product of the three next the Right-hand, multiplied one in another, by the Product of the two next the Left-hand, and the Quotient is the sixth Number sought for.

Example. If 100*l.* in 12 Months gain 6*l.* what will 500*l.* gain in 8 Months?

L. P.	Months	L. I.	L. P.	Months.
100	12	6	500	8
12			6	
Divisor	1200		3000	
			8	

12|00) 240|00 (20*l.* Answer.

00 Remains.

By the Work you may perceive that 500*l.* will gain 20*l.* in 8 Months at the Rate of 100*l.* Principal gaining 6*l.* Interest in 12 Months.

This Question, or any other of this Nature, may be resolved at two single Rules of Proportion, thus: If 100*l.* require 6*l.* what will 500*l.* require? The Answer is 30*l.*

Then say, If 12 Months require 30*l.* what will 8 Months require? The Answer (as before) is 20*l.*

The

The Double Rule of Indirect Proportion.

The Rule for stating your Question.

Place the three first Numbers toward the Left-hand in the same Order you did in the last Rule: And for the other two, place that the Fourth, which is of the same Denomination with your second Number, and consequently the other next the Right-hand: So will your first and last, viz. that required, be of one Denomination, your second and fourth of another, and your third and fifth of another. And,

The Rule for performing the Operation, is,

Divide the Product of the first, multiplied into the second; and that Product into the fifth, by the Product made of the third and fourth, and the Quotient is the Answer.

Example. *What Principal will raise 20l. in 8 Months at 6 per Cent. per Annum?*

L. P.	Months	L. I.	Months	L. I.
100	12	6	8	20
12		8		
1200		48	your Divisor.	
20				
	L. In.			

48) 24000 (500 Quotient for Answer; which proves the last Operation.

0 Remains.

The Reason and Demonstration of the Single Rule of Direct Proportion.

If 4 Numbers are geometrically proportional, the Rectangle or Product made of the Means, is equal to that of the two Extreams, from *Euclid, Lib. 6. Prop. 16.* from which I shall prove the Method for finding the fourth Proportional.

Example. *Admit 4 is in Proportion to 12, as 18 is to a fourth Number unknown; for which put [u] they will stand thus;*

i. e. As 4 is in Proportion to 12, so is 18 to the unknown Number; then from the fore-mentioned Proposition,

$$4u (= 216)$$

2. *i. e.* Four Times (u) (which represents the unknown Number) the Product of the first and fourth, is equal to 12 Times 18, *viz.* 216, the Product of the two Means; then it necessarily follows,

$$u = \frac{216}{4}$$

3. *i. e.* That (u) is equal to 216, divided by 4; for if 4 Times (u) is equal to 216, than 1 Time (u) must be equal to one fourth Part of 216: And,

$$\frac{216}{4} = 54$$

4. Since (u) or the unknown Number, is equal to one fourth Part of 216, and that $\frac{1}{4}$ Part of 216 is equal to 54, therefore (u) is equal to 54, which is the fourth Number sought; and if you compare the several Steps, you will find the fourth Number to be discovered after the same Method given for finding it, at the Beginning of this Rule, which is by multiplying the second and third Numbers together, and dividing the Product by the first.

Or thus, from this *Axiom*.

That the fourth Number containeth the third so often as the second does the first.

Hence $\frac{12}{4} = \frac{x}{18}$ that is $\frac{1}{4}$ of 12 is equal to one 18th of (u)

Now $\frac{12}{4} = 3$, therefore $\frac{x}{18} = 3$.

i. e. Twelve divided by 4, is equal to 3; therefore u divided by 18 must be equal to 3.

And if $\frac{x}{18} = 3$, then $3 \times 18 = u$.

i. e. If u divided by 18 equal to 3, then 3 Times 18 must be equal to u , and consequently (u) is equal to 54, for 3 Times 18 is 54, as before.

The Demonstration of the Single Rule of Indirect Proportion.

By the Definition of this Rule in the two foregoing Places, the Product of the first and second Numbers is equal to that of the third and fourth: From whence this Denomination arises.

6 9 3 u
Therefore by the Definition.

$$6 \times 9 = 3 \times u, \text{ or}$$

$$54 = 3u,$$

i. e. The Rectangle of the two first Numbers 6 by 9, is equal to that of u by 3.

Now

Now if $54 = 3u$, $u = \frac{54}{3}$.

i. e. If 54 is equal to three Times (u), then it follows, that one Time (u) is equal to one third Part of 54.

$$\frac{54}{3} = 18 \text{ therefore}$$

$$u = 18$$

i. e. One Third of 54, being 18, therefore u is equal to 18, which was required; so the Definition is cleared.

By the same Rules may the double Rules of Proportion be demonstrated; but this Book being chiefly designed for the Practice of young Beginners, my designed Brevity in Things speculative requireth, that I pass forward to what is more practical.

The Proof of the Rules of Proportion.

Every Kind of Proportion I have discoursed of may have the Operations proved two Ways.

Single Direct Proportion.

When four Numbers are Direct in Proportion, the Product made of the first and fourth, is equal to that of the second and third; otherwise the Work is not rightly performed.

2dly, The second Way is thus: As the fourth Number is to the third, so is the second to the first; otherwise the Work is not right.

Single Indirect Proportion.

When four Numbers are in an Indirect Proportion, the Rectangle of the first and second, is equal to that of the third and fourth; otherwise there is an Error in the Work.

2dly, Thus: As the first is to the third, so is the fourth Number to the second, in a direct Proportion; otherwise the Operation is not rightly performed.

Double Direct Proportion.

When a sixth Number is found in a Direct Proportion, the Rectangle of the first, second, and sixth, is equal to that of the third, fourth, and fifth Numbers, if the Work is not erroneous.

2dly, Thus: As the Product of the fourth and fifth Numbers is to the sixth, so is the Product of the first and second to the third, in a Double Direct Proportion.

Double

Double Indirect Proportion.

When five Numbers are given, and a sixth found in an Indirect or Reverse Proportion, the Rectangle of the first, second, and fifth, is equal to that of the third, fourth, and sixth Numbers, if the Work is performed right.

2dly, Thus: As the fifth Number is to the Product of the third and fourth, so is the sixth to the Product made of the first and second, by one Single Direct Proportion.

Arithmetical PROGRESSION

IS when a Rank or Series of Numbers differ orderly from one another, by some common Number.

To find the Sum of any Arithmetical Progression, add the first and last Numbers together, and multiply that Sum by Half the Number of Places, and that Product is the Sum. But if the Number of Places be odd, multiply the said Number of Places by Half of the first, and last added, and that Product is the Sum.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,

What the Sum?

16 Last:

1 First:

17 Sum.

8 Half of the Number of Places.

136 Sum of the Whole.

Suppose a Man hireth a Room for a Year, and agreeth to pay the first Week 5d. the second Week 9d. and for the third Week 13d. so paying every Week 4d. more until 52 Weeks, or a Year is finished, I demand what the Rent will come to?

Answer 23l. 3s. 8d.

Here you are to consider that the common increasing Number is 4d. so that the last Week must amount to 51 Times 4, added to the Pay of the first Week, which is 5d. then will the last Week come to 209 Pence, then Work as in the Example.

	51	12)	5564 (463
	4		48
Product	204		76
	5		72
Added	209 the last Week.		44
	5 the first Week.		36
Added	214		8d.
	26 Half the Weeks in a Year.		
		210)	4613 (23l. 3s. 8d.
	1284		
	428		
Pence	5564		

Geometrical Progression.

SUPPOSE one sold 12 Ells of Cloth, to receive for the first Ell 1d. the second 2d. the third 4d. and so doubling, what is paid for the 12 Ells?

0, 1, 2, 3, 4, 5, 6.
1, 2, 4, 8, 16, 32, 64.
32
128
192
2048
2

Answer 4096 Pence.

Note. That if this Question had been for a Farthing a Button, or the like, the Answer would have been Farthings.

Suppose one sold a Horse having 4 Shoes, and in every Shoe 6 Nails, to receive for the first Nail 1 Farthing, the second Nail 2 Farthings, the third Nail a Penny, and so doubling, how much is paid for the last Nail, and the Price of the Horse? Answer 17476l. 5s.

0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,
1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096,

4096

12288

18422

81920

8388608

2

Farthings 16777216

Or if this Question had been of a Coat sold at a Barley-Corn a Button, and so doubling to 24 Buttons, (accounting 900 Corns to a Pint) I divide the 16777216 by the 900 Corns, the Quotient gives about 11641 Pints, which divide by 64, (the Pints in a Bushel) the Quotient gives about 292 Bushels, or about 36 Quarters of Barley for the Coat.

The Rule of FELLOWSHIP or COMPANY

MAY be fitly divided into Gain, Loss, and Time.

A General Rule.

*As general Stock to general Profit bears,
So each Man's Stock in general Profit shares.*

That is to say,

Every Man's particular Stock being added together, the Total must be the first Number in the Rule of Three, the Gains the second, and every Man's particular Stock the third ; as,

Suppose two Merchants in Company, A. laid in 20 l. B. laid in 40 l. whereby was gained 50 l. what is each Man's Part of the Gain ?

A. 20
B. 40
60

If 60 l. gain 50 l. what will 20 l. gain :

20

60) 100|0 (16 l. 13s. 4d.

6

—

40

36

—

4

L

If

If 50*l.* gain 50*l.* what will 40*l.* gain?

$$\begin{array}{r}
 40 \\
 \hline
 610 \quad 20010 \quad (33*l.* 6*s.* 8*d.*) \\
 18 \\
 \hline
 20 \\
 18 \\
 \hline
 2
 \end{array}$$

l. s. d.
 33 06 8
 16 13 4

Proof 50 — —

Suppose two Merchants make a Stock, A. laid in 45*l.* and B. laid in 68*l.* whereby was gained 32*l.* how must the Gains be divided?

If 113*l.* gain 32*l.* what will 45*l.* gain?

$$\begin{array}{r}
 A. 45 \\
 B. 68 \\
 \hline
 113
 \end{array}
 \left.
 \begin{array}{r}
 45 \\
 160 \\
 128 \\
 \hline
 \end{array}
 \right\}$$

113) 1440 (12*l.* $\frac{84}{113}$ A's Part.

113

310

226

84

If 113*l.* gain 32*l.* what will 68*l.* gain?

68

256

192

113) 2176 (19*l.* $\frac{29}{113}$ B's Part.

113

1046

1017

29

The 29 of the Fraction multiplied by 240, (the Pence in 20*s.*) and the Product divided by 113, the Quotient tells the Pence.

Suppose

Suppose three Merchants, A. B. and C. join their Monies to make a Stock of 25000*l.* of which A. laid in 10000*l.* B. 8000*l.* and C. 7000*l.* with this (after a certain Time of Trading) they gained 7500*l.* how must this be parted?

If 25000*l.* gain 7500*l.* what will 10000*l.* gain?

10000

25|000 75000|000 (3000*l.* A's Part.

75

0000

If 25000*l.* gain 7500*l.* what will 8000*l.* gain?

8000

25|000 60000|000 (2400*l.* B's Part.

50

100

100

0

If 25000*l.* gain 7500*l.* what will 7000*l.* gain?

7000

25|000 52500|000 (2100*l.* C's Part.

50

25

25

0

A. 3000*l.*
B. 2400*l.*
C. 2100*l.*

} Stocks added.

7500

Rule of FELLOWSHIP with Time.

The RULE.

EVERY Man's Stock must be multiplied by his Time, and the Total of those Products added together is the first Number, the Gain or Loss the second Number, and the Product of every Man's particular Stock and Time the third Number.

L 2

Suppose

If 1728^l. give 45^l. what will 768^l. give?

$$\begin{array}{r}
 1728) 34560 \text{ 20}l. \\
 \underline{3456} \\
 00
 \end{array}
 \qquad
 \begin{array}{r}
 45 \\
 \underline{} \\
 3840 \\
 \underline{3072} \\
 34560
 \end{array}$$

A. pays 20^l. of the Rent,

B. pays 15^l. C. pays 10^l. which makes 45^l.

Of FRACTIONS.

Notation and Numeration of Vulgar Fractions:

A FRACTION is one or more Parts of an Unit or Integer, according as the same is divided.

Every Fraction consisteth of two Parts, *viz.* a Numerator, and a Denominator.

The Denominator is placed (in Writing) below the Line you write in, and sheweth how many Parts the Integer, or Unit, is divided into.

The Numerator of a Fraction is (in Writing) placed above the Line, and sheweth how many of the said Parts, expressed by the Denominator, are contained in the Fraction. For Instance :

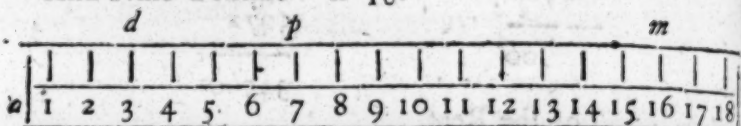
$\frac{3}{4}$ Numerator.
Denominator.

In reading Fractions, the Numerator is first mentioned, then the Denominator ; as the Fraction above is read, three fourth Parts of any Thing ; *i. e.* the Denominator sheweth, that the Integer is divided into four Parts ; and the Numerator, that three of those fourth Parts are contained in the Fraction. So by the same Reason,

$\frac{1}{4}$ is one fourth Part,
 $\frac{2}{4}$ is one Half, or two fourth Parts,
 $\frac{3}{4}$ is two third Parts,
 $\frac{5}{6}$ is five sixth Parts, &c. as in the following Table.

One Half, &c.	is	$\frac{1}{2}$,	$\frac{2}{4}$,	$\frac{3}{6}$,	$\frac{4}{8}$,	$\frac{5}{10}$,	$\frac{6}{12}$,	$\frac{7}{14}$,	$\frac{8}{16}$,	$\frac{9}{18}$,	$\frac{10}{20}$.
Two Thirds, &c.	is	$\frac{2}{3}$,	$\frac{4}{6}$,	$\frac{6}{9}$,	$\frac{8}{12}$,	$\frac{10}{15}$,	$\frac{12}{18}$,	$\frac{14}{21}$,	$\frac{16}{24}$,	$\frac{18}{27}$,	$\frac{20}{30}$.
Three Fourths, &c.	is	$\frac{3}{4}$,	$\frac{6}{8}$,	$\frac{9}{12}$,	$\frac{12}{16}$,	$\frac{15}{20}$,	$\frac{18}{24}$,	$\frac{21}{28}$,	$\frac{24}{32}$,	$\frac{27}{36}$,	$\frac{30}{40}$.
Four Fifths, &c.	is	$\frac{4}{5}$,	$\frac{8}{10}$,	$\frac{12}{15}$,	$\frac{16}{20}$,	$\frac{20}{25}$,	$\frac{24}{30}$,	$\frac{28}{35}$,	$\frac{32}{40}$,	$\frac{36}{45}$,	$\frac{40}{50}$.
Five Sixths, &c.	is	$\frac{5}{6}$,	$\frac{10}{12}$,	$\frac{15}{18}$,	$\frac{20}{24}$,	$\frac{25}{30}$,	$\frac{30}{36}$,	$\frac{35}{42}$,	$\frac{40}{48}$,	$\frac{45}{54}$,	$\frac{50}{60}$.

Six Sevenths, &c. is $\frac{6}{7}, \frac{6}{8}, \frac{6}{9}, \frac{6}{10}$.
 Seven Eighths, &c. is $\frac{7}{8}, \frac{7}{9}, \frac{7}{10}$.
 Eight Ninths, &c. is $\frac{8}{9}, \frac{8}{10}$.
 And Nine Tenth. is $\frac{9}{10}$.



For the whole Line ab being a Unit divided into 18 equal Parts, the Line ad is $\frac{3}{18}$, the Line ap is $\frac{7}{18}$, the Line am $\frac{18}{18}$, &c.

Fractions are either proper or improper.

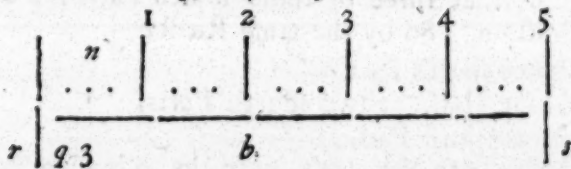
A Fraction properly so called, or a proper Fraction, is when the Numerator is less than the Denominator, as the Fractions foregoing.

An improper Fraction is, when the Numerator is greater than the Denominator, as $\frac{7}{4}, \frac{8}{5}$, &c. Again,

Fractions are either Simple or Compound.

A Simple Fraction is, when the Fraction is immediately the Fraction of a Unit or Integer, as those foregoing in the Table, &c.

A Compound Fraction is a Fraction of a Fraction, as $\frac{1}{2}$ of $\frac{1}{4}$ of a Pound Sterling, which is equal to 2s. 6d. Or it is when a Unit is divided into a Number of Parts, and each of those Parts are again subdivided into Parts; these last Parts are Compound Fractions, being the Fractions of the Fractions of a Unit. So the whole Line (rs) being a Unit, the Line $r1$, is $\frac{2}{5}$, $r2$, is $\frac{2}{5}$, because the Unit is divided into five Parts; which five Parts being subdivided into four Parts, as under the Line, I say, each of these last Parts are Fractions of a Fifth Part; so the Line rq is $\frac{1}{4}$ of $\frac{1}{5}$ of the Line rs ; the Line $r3$, is $\frac{3}{4}$ of $\frac{1}{5}$ of it, &c.



Reduction of Vulgar Fractions.

It may seem strange to some, that Reduction is here taught before Addition, &c. but it is necessary it should be so, because Reduction is made use of in all the subsequent Rules,

to fit and prepare Fractions for Additions, Subtraction, &c.

Case.] When a mixt Number is given to be reduced to an improper Fraction.

Rule.] Multiply the Integers by the Denominator of the Fraction, and to the Product add the Numerator, and place the Sum over the Denominator for a new Fraction.

Example. Reduce $12\frac{3}{4}$ to an improper Fraction.

$12\frac{3}{4}$

See the Marginal Operation.

Answer $5\frac{3}{4}$

The Reason of this Rule.

If the Numerator and Denominator of a Fraction be alike, the Value thereof must be a Unit; so that if you assign a Denominator to any whole Number that shall be reduced to an improper Fraction, your Numerator must be the Product of the whole Number by that Denominator. This 1 being reduced to such a Fraction, whose Denominator is 2; 2 Times 1 is the Numerator, and 2 the Denominator, which is $\frac{2}{2}$ (or 1;) because the Unit is divided into two Parts, and there are two of those Parts in the Fraction; and as many Units as there are in the integral Parts, so many Times the Denominator must the Numerator be; because 1 is $\frac{2}{2}$, 2 is $\frac{4}{2}$, &c. which Numerator made of the integral Part of the mixt Number, must be added to the Numerator of the fractional Part, for the Reason mentioned in Addition of Vulgar Fractions.

Case.] When an improper Fraction is given to be reduced to a whole or mixt Number.

Rule.] Divide the Numerator of the Fraction by the Denominator, and the Quotient is a whole Number; and if any Thing remains, it must be placed over the Divisor.

Example. Reduce $5\frac{1}{4}$ to a whole or mixt Number.

4) 51 ($12\frac{3}{4}$ Answer, which proves the last Case.

—

11

—

3 Remains.

The Reason of this Rule is,

That so often as the Denominator can be had in the Numerator, so many Units doth the Fraction contain; for $\frac{2}{2}$

L 4

is 1, $\frac{4}{2}$ is 2, $\frac{6}{2}$ is 3; so that $\frac{7}{2}$ must be $3\frac{1}{2}$, because 2 can be had 3 Times in 7, and 1 remains, which must be $\frac{1}{2}$, because 1 is Half of 2, and $\frac{2}{2}$, as I said before, is a Unit or One.

Case.] When Fractions have different Denominators, and are to be reduced to a common Denominator.

Rule.] Multiply the Numerator of each Fraction singly, into all the Denominators of each Fraction given, excepting its own, and the Product is a new Numerator; and if you multiply all the Denominators one in another, the Product is a common Denominator.

Example. Reduce $\frac{2}{3}$, $\frac{3}{4}$, and $\frac{5}{7}$, to a common Denominator.

First.

3 Numerator of the 2d.
3 Denominator of the 1st.

9 Product.
7 Denominator of the 3d.

63 Second new Numerator.

Secondly.

2 First Numerator.
4 Second Denominator.

8 Product
7 Third Denom. } Mult.

56 First new Numerator.

Thirdly.

5 Numerator of the 3d.
4 Denominator of the 2d.

20 Product.
3 Denominator of the 1st.

60 Third new Numerator.

Lastly.

3 } Multiply.
4 } Denominators.
12 } Multiply.
7 }

84 Common Denominator:

Now if you place each new Numerator over the common Denominator, you will have

$\frac{56}{84}$ } Equivalent to $\left\{ \begin{array}{l} \frac{2}{3} \text{ The first Fraction given.} \\ \frac{63}{84} \text{ The second Fraction.} \\ \frac{60}{84} \text{ The third Fraction.} \end{array} \right.$

The Reason of this Rule.

Since the End of this Rule is to make the Denominators alike, and the Numerators proportioned thereto, as those given are in Proportion: If therefore the Denominators are multiplied by any Numbers, that will make the Products alike; and if the respective Numerator be multiplied by the same Number you multiplied its Denominator, it will produce the same Thing as this Rule produceth: As, if I would reduce

reduce $\frac{2}{3}$ and $\frac{3}{4}$ to a common Denominator; if I multiply the Denominator 3 by 8, and the Denominator 4 by 6, the Products will be each 24 for a common Denominator; and if the Numerator 2 be multiplied by the said 8, and the 3 by the 6, the Products will be 16 and 18; so the Fractions in a common Denominator are $\frac{16}{24}$ and $\frac{18}{24}$, equal to $\frac{8}{12}$ and $\frac{9}{12}$, which would have been produced by the foregoing Rule. But since it would in some Cases be tedious to find out Numbers, that, multiplying the several Denominators, would produce a common Denominator, it is therefore the most certain Way of performing the same, to multiply the Denominators one in another, for a common Denominator, as in the Instance last above, of $\frac{2}{3}$ and $\frac{3}{4}$, the 3 by the 4, and the 4 by the 3, must produce each 12 for a common Denominator; and if you multiply, as before, each Numerator by the Number you multiplied its Denominator, the Products are new Numerators, proportioned to the common Denominator, as the several Numerators given are proportioned to their respective Denominators.

Case. To reduce a Fraction into its lowest Terms.

Rule. Take $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{1}{4}$, &c. of the Numerator and Denominator.

Example. Reduce $\frac{56}{84}$ to its lowest Terms.

Say, Half of 56 is 28, and $\frac{1}{2}$ of 84 is 42; the $\frac{1}{2}$ of 28 is 14, and $\frac{1}{2}$ of 42 is 21; and because you cannot take half $\frac{14}{21}$, make Trial if you can take $\frac{1}{3}$, &c. but since you can only take $\frac{1}{7}$ of both, say, the 7's in 14 is 2, and the 7's in 21 is 3; so is the given Fraction equivalent to $\frac{2}{3}$, and proves the first Fraction in the last Case to be right: See the Work.

$\frac{56}{84}$	or $\frac{28}{42}$	or $\frac{14}{21}$	or $\frac{2}{3}$
Take	Take	Take	Lowest Term
$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{7}$	

The Reason of the last Rule.

By the *Lemma* to the 26th Prop. of the 5th Book of *Euclid's Elem.* Two Numbers, howsoever different, if they are divided by one and the same Number, the Quotients will have like Proportion one to another, as the Numbers given to be divided have to each other: As $\frac{100}{100}$ equal to

$\frac{1}{10}$; because, if 100 the Numerator be divided by 100, the Quotient is 1; and 1000 the Denominator divided by 100, the Quotient is 10; which $\frac{1}{10}$ is equal to $\frac{100}{1000}$; because, as 100 is to 1000, so is 1 to 10; for $100 \times 10 = 1000 \times 1$.

There are other Rules for the performing the Working of the last Case, but none so proper for a young Man's Practice as the foregoing.

Case.] To reduce a compound Fraction to a simple one, equivalent to the Compound.

Rule.] Multiply all the Numerators one in another, for the Numerator of the Answer, and the Denominators one in another, for that of the Answer.

Example. Reduce $\frac{1}{4}$ of $\frac{2}{12}$ of $\frac{1}{20}$ into a simple Fraction.

The Product of the Denominators 4, 12, and 20, is 960, and the Product of 1, 1, and 1, is 1; so the simple Fraction sought for is $\frac{1}{960}$.

The Reason of the last Rule.

By the Definition of a compound Fraction aforesaid, it is shewed, that such a Fraction is nothing but the Subdivision of the Parts of a Unit; where, for Instance, you have a Line suppos'd a Unit divided into 5 Parts, which represents the Denominator of that Part of a compound Fraction always next the Right-hand in the Reading thereof; each of which 5 Parts being again divided into 4 Parts, 4 is the Denominator of that Part of a compound Fraction next the Left-hand; each of which Parts being $\frac{1}{4}$ of $\frac{1}{5}$ of the Unit, (or whole Line) shews, that there are 20 such Parts as that 4th, in the Line; which is the Reason why we always multiply the Denominators together, (as 4 and 5) to reduce the Fraction of a Fraction into the Fraction of a Unit, or a Compound to a Simple, which is all one. And the Reason of multiplying the Numerators together (as in $\frac{3}{5}$ of $\frac{2}{3}$ of the last foregoing Line, Page 222) is because $\frac{3}{5}$ of $\frac{2}{3}$ (as $r n$) is but one Half of $\frac{3}{4}$ of $\frac{2}{3}$; therefore $\frac{3}{5}$ of $\frac{2}{3}$ must be 2 Times ($r n$) equal to ($r b$)-or $\frac{6}{20}$ of the Line ($r n$); for that which before the Sub-division of the Line was $\frac{3}{5}$ is (now the whole Line is divided into 20) $\frac{6}{20}$, so that $\frac{3}{5}$ of $\frac{2}{3}$ is equal to $\frac{6}{20}$, and consequently 2 Times $\frac{3}{20}$ is $\frac{6}{20}$ which plainly shews, why the Denominators of compound Fractions are multiplied together for that of a single Fraction, and the Numerators are likewise multiplied together for the Numerator of the same Fraction.

Case.]

Case.] To find the Value of any Fraction, whether the same be of Coin, Measure, Weight, &c.

Rule.] Multiply the Numerator of the Fraction by such a Number of Units of the next inferior Denomination, as is equal to a Unit of the Denomination the Fraction is Part of, and divide the Product by the Denominator, so the Quotient will answer your Question; but if any Thing remain, reduce that to the next lower Denomination, and divide as before.

Example. What is the Value of $\frac{134}{146}$ of a Hundred Weight?
See the Operation.

134	Hundred.	}	Multiply.
4	Quarters in a Hundred		
146) 536	(3 Quarters of a Hundred.		
438			
98	Quarters remain.	}	Multiply.
28	Pounds in a Quarter.		
784			
196			
146) 2744	(18 Pounds.		
146			
1284			
1168			
116	Pounds remain.	}	Multiply.
16	Ounces in a Pound.		
696			
116			
146) 1856	(12 Ounces.		
146			
396			
292			
104	Ounces remain.	}	Multiply.
16	Drams in an Ounce.		
624			
104			
146) 1664	(11 Drams $\frac{58}{146}$		
146			
204			
146			
58			

Q. lb. oz. dr.

Answer 3 18 12 11 $\frac{158}{146}$

226 *The YOUNG MAN'S Companion.*

$\frac{1}{10}$; because, if 100 the Numerator be divided by 100, the Quotient is 1; and 1000 the Denominator divided by 100, the Quotient is 10; which $\frac{1}{10}$ is equal to $\frac{100}{1000}$; because, as 100 is to 1000, so is 1 to 10; for $100 \times 10 = 1000 \times 1$.

There are other Rules for the performing the Working of the last Case, but none so proper for a young Man's Practice as the foregoing.

Case.] To reduce a compound Fraction to a simple one, equivalent to the Compound.

Rule.] Multiply all the Numerators one in another, for the Numerator of the Answer, and the Denominators one in another, for that of the Answer.

Example. Reduce $\frac{1}{4}$ of $\frac{2}{12}$ of $\frac{1}{20}$ into a simple Fraction.

The Product of the Denominators 4, 12, and 20, is 960, and the Product of 1, 1, and 1, is 1; so the simple Fraction sought for is $\frac{1}{960}$.

The Reason of the last Rule.

By the Definition of a compound Fraction aforesaid, it is shewed, that such a Fraction is nothing but the Subdivision of the Parts of a Unit; where, for Instance, you have a Line suppos'd a Unit divided into 5 Parts, which represents the Denominator of that Part of a compound Fraction always next the Right-hand in the Reading thereof; each of which 5 Parts being again divided into 4 Parts, 4 is the Denominator of that Part of a compound Fraction next the Left-hand; each of which Parts being $\frac{1}{4}$ of $\frac{1}{5}$ of the Unit, (or whole Line) shews that there are 20 such Parts as that 4th, in the Line; which is the Reason why we always multiply the Denominators together, (as 4 and 5) to reduce the Fraction of a Fraction into the Fraction of a Unit, or a Compound to a Simple, which is all one. And the Reason of multiplying the Numerators together (as in $\frac{3}{4}$ of $\frac{2}{5}$ of the last foregoing Line, Page 222) is because $\frac{3}{4}$ of $\frac{2}{5}$ (as $r n$) is but one Half of $\frac{3}{4}$ of $\frac{2}{5}$; therefore $\frac{3}{4}$ of $\frac{2}{5}$ must be 2 Times ($r n$) equal to $(r b)$ -or $\frac{6}{20}$ of the Line (r); for that which before the Sub-division of the Line was $\frac{1}{4}$, is (now the whole Line is divided into 20) $\frac{4}{20}$, so that $\frac{1}{4}$ of $\frac{4}{20}$ is equal to $\frac{1}{20}$, and consequently 2 Times $\frac{1}{20}$ is $\frac{2}{20}$, which plainly shews, why the Denominators of compound Fractions are multiplied together for that of a single Fraction, and the Numerators are likewise multiplied together for the Numerator of the same Fraction.

Case.]

Case.] To find the Value of any Fraction, whether the same be of Coin, Measure, Weight, &c.

Rule.] Multiply the Numerator of the Fraction by such a Number of Units of the next inferior Denomination, as is equal to a Unit of the Denomination the Fraction is Part of, and divide the Product by the Denominator, so the Quotient will answer your Question; but if any Thing remain, reduce that to the next lower Denomination, and divide as before.

Example. What is the Value of $\frac{134}{146}$ of a Hundred Weight? See the Operation.

$$\begin{array}{r} 134 \text{ Hundred.} \\ 4 \text{ Quarters in a Hundred} \end{array} \left. \vphantom{\begin{array}{r} 134 \\ 4 \end{array}} \right\} \text{Multiply.}$$

$$146 \overline{) 536} \text{ (3 Quarters of a Hundred.}$$

$$438$$

$$\begin{array}{r} 98 \text{ Quarters remain.} \\ 28 \text{ Pounds in a Quarter.} \end{array} \left. \vphantom{\begin{array}{r} 98 \\ 28 \end{array}} \right\} \text{Multiply.}$$

$$784$$

$$196$$

$$146 \overline{) 2744} \text{ (18 Pounds.}$$

$$146$$

$$1284$$

$$1168$$

$$\begin{array}{r} 116 \text{ Pounds remain.} \\ 16 \text{ Ounces in a Pound.} \end{array} \left. \vphantom{\begin{array}{r} 116 \\ 16 \end{array}} \right\} \text{Multiply.}$$

$$696$$

$$116$$

$$146 \overline{) 1856} \text{ (12 Ounces.}$$

$$146$$

$$396$$

$$292$$

$$\begin{array}{r} 104 \text{ Ounces remain.} \\ 16 \text{ Drams in an Ounce.} \end{array} \left. \vphantom{\begin{array}{r} 104 \\ 16 \end{array}} \right\} \text{Multiply.}$$

$$624$$

$$104$$

$$146 \overline{) 1664} \text{ (11 Drams } \frac{58}{146})$$

$$146$$

$$\begin{array}{r} 204 \\ 146 \\ \hline 58 \end{array}$$

Q. lb. oz. dr. Answer 3 18 12 11 $\frac{158}{146}$

The Reason of this Rule.

The Reason of this Rule is plain; for suppose a Line, divided into 20 Parts, the whole Line, as (*a b*) will represent 1 Pound, and the 20 Parts, 20 Shillings. Now suppose there is a Fraction given, of which you will find the Value, as $\frac{3}{4}$ of a Pound Sterling; draw another Right Line of the same Length with the former, and parallel thereto, as (*c d*) which divide (according to the Definition of a Fraction) into 4 Parts, to represent your Denominator; and right against 3 of those Parts in this Line shall stand 15 in the Line of Shillings; which shews, that $\frac{3}{4}$ of a Pound Sterling is 15s. and the same may be said of any other Fraction; for as 4 (the whole Line *c d*, or Denominator of the Fraction given) is in Proportion to 20s. (the whole Line *a b*); so is 3 the Numerator or Number of Parts in the Fraction given, as in the lower Line (*c r*) to 15s. the Value of the said Fraction given: And therefore do you multiply and divide as in the last Rule directed for.

Denom.	s.	Numer.	s.
4	20	3	15
	3		
4) 60 (15s. Answer.			
20	1	20	1
1	2	3	4
2	3	4	5
3	4	5	6
4	5	6	7
5	6	7	8
6	7	8	9
7	8	9	10
8	9	10	11
9	10	11	12
10	11	12	13
11	12	13	14
12	13	14	15
13	14	15	16
14	15	16	17
15	16	17	18
16	17	18	19
17	18	19	20
18	19	20	
19	20		
20			
a	1	2	3
b	4	5	6
c	7	8	9
d	10	11	12
e	13	14	15
f	16	17	18
g	19	20	
h			
i			
j			
k			
l			
m			
n			
o			
p			
q			
r			
s			
t			
u			
v			
w			
x			
y			
z			

Case.] To reduce Fractions of a lower Denomination to a higher.

Rule.] Consider what Denomination your Fraction is of, and how many of that make a Unit of the next, &c. to the Denomination you would have your Fraction reduced to; then work as in the fifth Case of this Chapter.

Example. Reduce $\frac{1}{2}$ of an Ounce of Avoirdupois into the Fraction of an Hundred Weight.

Ratio.] 16 Ounces being 1 Pound; $\frac{1}{2}$ of an Ounce is $\frac{1}{32}$ of a Pound; then I consider that 28 Pound is a Quarter of a Hundred, and that 4 Quarters is one Hundred.

ded; therefore $\frac{1}{2}$ of an Ounce is $\frac{1}{2}$ of $\frac{1}{16}$ of $\frac{1}{2}$ of $\frac{1}{4}$ of a Hundred; which is $\frac{1}{8960}$ of a Hundred.

Case.] When you would reduce a Fraction of a higher to a Fraction of a lower Denomination.

Rule.] Reduce the Numerator of the Fraction into that Denomination you would have your Fraction of, and place it over the Denominator given for a new Fraction.

Example. Reduce $\frac{1}{8960}$ of a Hundred into a Fraction of an Ounce.

112 Pounds.

16 Ounces in a Pound. } Multiply.

672

112

Product 1792 Ounces in the Numerator: So the Answer is $\frac{1792}{8960}$; which Fraction in its lowest Term is $\frac{1}{5}$, and proves the last Case. See the Work.

$\frac{1792}{8960}$	$\frac{896}{4480}$	$\frac{448}{2240}$	$\frac{112}{560}$	$\frac{16}{280}$	$\frac{2}{40}$	$\frac{1}{5}$
Take $\frac{1}{2}$	Take $\frac{1}{2}$	Take $\frac{1}{2}$	Take $\frac{1}{2}$	Take $\frac{1}{2}$	Take $\frac{1}{2}$	

Proof, or more brief by dividing the first by 1792.

Ratio.] The Reason of this Rule is grounded upon that of a foregoing Case, (omitting Division by the Denominator:) for in 1 C. or 112lb. are 1792 Ounces; now supposing the Denominator 1792, $\frac{1}{1792}$ of a C. is just $\frac{1792}{8960}$ of an Ounce, or 1 oz. So, by the same Reason, the Hundred being, as in the Example, divided into 8960 Parts, each Part must be less than an Ounce; and to know therefore how much less, or what Part of an Ounce the said $\frac{1792}{8960}$ is, is no more than to see how many Times 1792 is contained in 8960; for how much soever 1792 is less than 8960, so much must the Fraction want of being a Unit (as here of 1 Ounce) by the Reason of the foregoing Rules: So that 1792 being but $\frac{1}{5}$ of 8960, it follows, that $\frac{1792}{8960}$ is but $\frac{1}{5}$ of an Ounce.

Addition.

Case.] When a simple Fraction is to be added to a simple.

Rule.] If the Fractions are not in a common Denominator, reduce them to one by the Case foregoing; then add the

230 *The YOUNG MAN's Companion.*

the Numerators together, and divide the Sum by the common Denominator, and the Quotient is the Sum required; and if any Thing remain, place it over the Divisor.

Example, To $\frac{2}{3}$ add $\frac{5}{6}$.

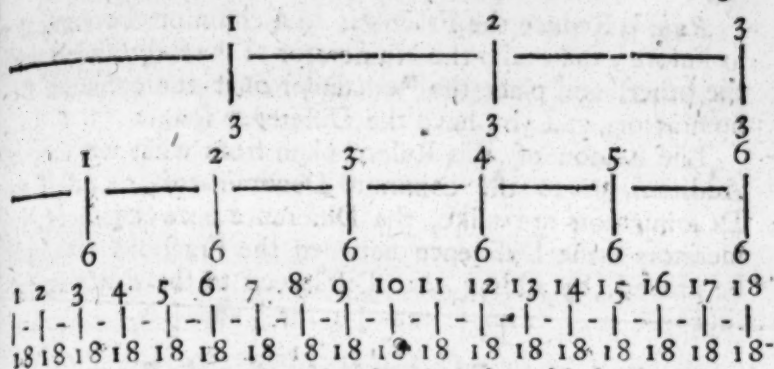
The Fractions in a common Denominator are,

$\frac{12}{18}$ $\frac{15}{18}$
12 The first Numerator,
15 The Second.

27 The Sum, which divided by 18 is 1,
 $\frac{2}{18}$ or $\frac{1}{9}$ for Answer.

The Reason of the Rule foregoing.

The Reason why you are first to reduce your Fractions to a common Denominator, before you can know their Total Sum, is, because the Aggregate of most Fractions could otherwise never be discovered; for a Fraction is more or less, according as the Numerator is more or less in Proportion to its Denominator; so the Numerators are only to be added. Now suppose (as in the foregoing Example) that $\frac{2}{3}$ is to be added to $\frac{5}{6}$; in one of these Fractions, the Unit is divided into 6 Parts, and in the other, into 3 Parts; now if I should add the Numerators together, they make 7; but of which of these Parts it is not known: But if the Fractions are reduced to a common Denominator, their Numerators will still retain the same Proportion to their Denominators; and when the Unit is divided in both Fractions into a like Number of Parts, the Sum of those Parts contained in each Fraction, is the true Aggregate of both Fractions; so $\frac{1}{4}$ and $\frac{3}{4}$ is $\frac{4}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ is $\frac{5}{4}$: Or as in the 3 Lines following, which are of equal Length, and supposed each a Unit; the 1st divided into 3, the 2d into 6 Parts, are the Denominators given, and the 3d Line is divided into 18 Parts, (the Product of 3 and 6) which is the common Denominator; where right against $\frac{2}{3}$ (in the uppermost Line) you have $\frac{12}{18}$ in the lowest Line; and against $\frac{5}{6}$ in the 2d Line you have $\frac{15}{18}$ in the lowest; which shews plainly, that $\frac{2}{3}$ is $\frac{12}{18}$, and $\frac{5}{6}$ is $\frac{15}{18}$: Now the Sum of 12, and 15 Parts of the lowest Line, is $\frac{27}{18}$, or one whole Line and a Half, as by Example.



Case.] When a mixt Number is to be added to a mixt.

Rule.] Work with the fractional Parts as before, and afterwards add the Sum of the Fractions to the Sum of the Integers, and you have your Desire.

Example. To $1\frac{1}{2}$ add $74\frac{2}{3}$.

The Sum of the Fractions by the last Case is $1\frac{7}{10}$ which added to 1 and 74, makes $76\frac{1}{10}$.

$$76\frac{1}{10}$$

$$\left. \begin{array}{r} 1\frac{7}{10} \\ 1. \end{array} \right\} \text{Add}$$

$$74$$

$$76\frac{1}{10} \text{ the Sum required.}$$

Or you may perform the Work, by reducing the given Numbers to improper Fractions; and so proceeding as formerly directed.

Case.] When a compound Fraction is to be added to a simple one.

Rule.] Reduce the compound Fraction to a simple one, by your former Directions; then find out the Sum.

Example. To $\frac{15}{42}$ add $\frac{3}{8}$ of $\frac{2}{3}$.

The compound Fractions reduced to a simple one is, $\frac{6}{24}$ or $\frac{1}{4}$.

The common Denominator of $\frac{1}{4}$ and $\frac{15}{42}$, is as followeth, $\frac{42}{608}$ and $\frac{60}{168}$.

The Sum of the Numerators is 102, so that $\frac{102}{168}$ is the Answer.

Subtraction,

Case.] When a single Fraction is to be deducted from a simple one.

Rule.]

232 *The YOUNG MAN'S Companion.*

Rule.] Reduce the Fractions to a common Denominator as before; then take the Numerator of the Subtrahend from the other, and place the Remainder over the common Denominator, and you have the Difference sought.

The Reason of this Rule is plain from what was said of Addition, as to the common Denominators; and if the Denominators are alike, the Difference between their Numerators is the Difference between the Fractions; as may be proved, by adding that Difference to the Fraction subtracted; as, $\frac{1}{4}$ from $\frac{3}{4}$, rests $\frac{2}{4}$; for $\frac{2}{4}$ and $\frac{1}{4}$ is $\frac{3}{4}$.

Example. From $\frac{3}{4}$ take $\frac{5}{12}$. See the Work.

36 the first Numerator. 48 the common Denominator.
20 the second Numerator.

16 Difference. Answer $\frac{16}{48}$ or $\frac{1}{3}$.

Case.] When a compound Fraction is to be deducted from a simple Fraction.

Rule.] Reduce the compound Fraction to a simple one; and then work as in the last Case.

Example. From $\frac{13}{27}$ take $\frac{2}{3}$ of $\frac{8}{9}$.

The compound Fraction reduced to a simple is, $\frac{16}{27}$.

13	16	27
27	14	14
98	64	108
26	16	27

351 the 1st Num. 224 the 2d Num. 378 the com. D.
224 deduct.

So the Answer is $\frac{127}{378}$.

127 Remains.

Case.] When a simple Fraction is to be deducted from a whole Number.

Rule.] Deduct the Numerator from the Denominator, and place the Remainder over the Denominator; then deduct 1 from the Integer, and place the Remainder before the remaining Fraction, and you have your Answer.

Example. From 12 take $\frac{5}{8}$. The Answer is $11 \frac{3}{8}$.

Or thus:

According to the Rules foregoing, place 1 under the 12, and

and so proceed, as in the last Case but two; but the first Way is the briefer.

Note. That the 1 borrowed from the 12 (in the first Method) is $\frac{8}{8}$; so that if from $\frac{8}{8}$ you take $\frac{5}{8}$, there rests $\frac{3}{8}$.

Multiplication.

Case.] When you are to multiply a simple Fraction by a simple one.

Rule.] Multiply all the Numerators one into another, for the Numerator of the Product, and likewise the Denominators for the Denominator of the Product.

Example. Multiply $\frac{1}{2}$ by $\frac{2}{3}$. Answer $\frac{2}{6}$ or $\frac{1}{3}$.

The Reason of Multiplication of Fractions.

The Effect of Multiplication of Fractions is different from that of whole Numbers; for the Product is always less than the Multiplicand, tho' it is always greater in the whole Numbers; the former being the multiplying of the Parts into which a Unit is divided, which must needs make the Parts produced less than those given; the latter multiplying Units, must needs augment the Number; the former decreasing the Parts of a Unit to infinite Littleness; the latter augmenting the Number of Units *ad Infinitum*. Now the Reason of the Rule is, That if any Fraction be multiplied by 1, it produces the Fraction given; if by $\frac{1}{2}$, it produceth $\frac{1}{2}$ the Fraction given, &c. So that to multiply $\frac{1}{2}$ by $\frac{2}{3}$, produceth $\frac{2}{3}$ of $\frac{1}{2}$, or $\frac{2}{12}$, or $\frac{1}{6}$, which is fully explained in the Reason of the Rule.

Case.] When you multiply a whole Number by a Fraction.

Rule.] Multiply the Integer by the Numerator of the Fraction, and the Product placed over the Denominator is the Answer; which differeth nothing from the last Case, if you put a Unit under the integral Part, making it like a Fraction.

Example. Multiply 126 by $\frac{3}{7}$. Answer $3\frac{7}{7}$ or 54.

Case.] When you multiply a simple by a compound Fraction.

Rule.] Reduce the compound Fraction into a simple one, and work as in the last Case but one.

Example. Multiply $\frac{1}{12}$ by $\frac{5}{9}$ of $\frac{3}{7}$. Answer $\frac{270}{1134}$ or $\frac{30}{133}$.

Division.

Division.

Case.] When you would divide a simple Fraction by a simple one.

Rule.] Having placed the Dividend and Divisor, as in the whole Numbers, multiply the Numerator of the Divisor, into the Denominator of the Dividend, for the Denominator of the Quotient : And the Denominator of the Divisor, into the Numerator of the Dividend, for the Numerator of the Quotient.

Example. Divide $\frac{1\frac{1}{2}}{\frac{1}{2}}$ by $\frac{1}{4}$.

($\frac{1}{2}$ $\frac{1\frac{1}{2}}{\frac{1}{2}}$ $\frac{2\frac{2}{2}}{\frac{1}{2}}$ or $1\frac{1}{2}$.)

The Reason of this Rule.

1. To make a Fraction greater in Value, is nothing but to multiply (or add to) its Numerator, or to divide or take from its Denominator.

2. To make a Fraction less, is to multiply (or add to) its Denominator, or to divide or take from its Numerator.

3. Upon these two Axioms the Reason of the Rule given, for Division of Vulgar Fractions will appear. Suppose, for Instance, $\frac{1\frac{3}{4}}{\frac{1}{4}}$ is to be divided by $\frac{1}{4}$; if it were divided by 1, the Quotient would be $\frac{1\frac{3}{4}}{\frac{1}{4}}$; and therefore, since it is to be divided by a Quarter of 1, the Quotient will be 4 Times $\frac{1\frac{3}{4}}{\frac{1}{4}}$.

4. For both in Fractions and whole Numbers, by how much less the Value of the Divisor is, by so much more will that of the Quotient be; which is, therefore, in this Example, according to the first Axiom $\frac{1\frac{3}{4}}{\frac{1}{4}}$; and shews plainly, why the Numerator of the Dividend is multiplied by the Denominator of the Divisor to produce the Numerator of the Quotient; whose Denominator is always the same with the Dividend, so often as 1 is the Numerator of the Divisor.

5. But if the $\frac{1\frac{3}{4}}{\frac{1}{4}}$ be divided by $\frac{3}{4}$, then the Quotient will (by the 4th Step) be but a 3d of the last Quote, viz. of $\frac{1\frac{3}{4}}{\frac{1}{4}}$, because $\frac{3}{4}$ (this Divisor) is three Times as much as the Divisor $\frac{1}{4}$.

6. The most natural Way, therefore, to divide by $\frac{3}{4}$, is to take a 3d of the Numerator of the Quotient arising from dividing the same Fraction by $\frac{1}{4}$, which is $\frac{1\frac{3}{4}}{\frac{1}{4}}$, according to the second Axiom.

7. But because it would often happen, that the Numerator

rator of
tor of t
more tr
licable
Axiom
the Nu
the Qu
3, whi
same as
the De
merator

Quotie

Case

Rule

as in t

Exa

Case

pound

Rule

work

Exa

Fractions

Ha

plyin

Thin

what

divid

A

this

10,

so th

it ;

war

way

Left

is .

den

.12

rator

rator of the Quotient cannot be divided by the Numerator of the Divisor without a Remainder, which would be more troublesome and less exact; it is therefore more practicable (since it produceth the same Thing by the second Axiom) to multiply the Denominator of the Dividend by the Number you should have divided the Numerator of the Quotient, which in this Instance of $\frac{3}{4}$ by $\frac{3}{4}$ is 14 by 3, which produceth 42; so the Answer is $\frac{14}{3}$ or $\frac{4}{1}$, the same as by the 6th Step; and plainly shews the Reason why the Denominator of the Dividend is multiplied by the Numerator of the Divisor, to produce the Denominator in the Quotient.

Case.] When you divide a whole Number by a Fraction.

Rule.] Place a Unit under the whole Number, and work as in the last.

Example. Divide 54 by $\frac{3}{4}$. See the Operation.

$\frac{4}{3}) \frac{54}{1}$ ($\frac{72}{3}$ Answer, or 126.

Case.] When you divide a simple Fraction by a compound Fraction.

Rule. Reduce the compound to a simple Fraction, and work as in the last Case but one.

Example. Divide $\frac{30}{133}$ by $\frac{5}{8}$ of $\frac{3}{4}$. The compound Fraction is $\frac{15}{88}$.

$\frac{88}{15}) \frac{30}{1}$ by $\frac{8800}{15}$ or $\frac{58}{3}$.

Having in the two last Rules shewed the Way of multiplying and dividing Fractions, it would be needless to say any Thing of the Golden Rule, since there is nothing in it but what has been already done, observing only to multiply and divide by the fractional Way instead of whole Numbers.

Reduction of Decimal Fractions.

A Decimal Fraction is only different from a Vulgar in this: That the Denominator of a Decimal Fraction is either 10, or some Power of 10, viz. 100, 1000, 10000, &c. so that the Denominator is easily known without expressing it; for in a Decimal Fraction there is a Point or Prick toward the Left-hand of the Numerator; which Point always possesses the like Place, as the first Figure toward the Left-hand would, if it were to be wrote down: Thus $\frac{1}{10}$ is .1; the Prick being in the Ten's Place, and, therefore, denotes the Denominator to be 10, $\frac{12}{100}$ is .12; $\frac{125}{1000}$ is .125; $\frac{1264}{10000}$ is .1264, &c.

The

236 *The YOUNG MAN's Companion.*

The Manner to reduce a Vulgar Fraction to a Decimal, is by this Proportion.

Rule.] As the Denominator of the Vulgar Fraction given, Is in Proportion to its Numerator :

So is 1000 ;

To the Numerator of the Decimal, whose Denominator is 1000 ;

Or, so is 10000 the Decimal, whose Denominator is 10000, &c.

Example. What is $\frac{1}{8}$ in a Decimal Fraction ? See the Operation.

$$8 : 1 :: 1000$$

$$\begin{array}{r} 1 \\ \hline 8 \overline{) 1000} \end{array}$$

125 Answer.

But because it sometimes happens that a Cypher or more is to possess the 1, 2, &c. Places of the Decimal toward the Left-hand, therefore take this

Rule.] As many Cyphers as you have in the third Number of the 3 in Proportion; as above, so many Places must you prick off in the Quotient toward the Right hand.

Example. How is qd. expressed in the Decimal of a Pound Sterling ?

Rule.] Consider, that in a Pound are 240 Pence ; therefore qd. is $\frac{9}{240}$ in a Vulgar Fraction ; for qd. is $\frac{9}{12}$ of $\frac{1}{10}$ of a Pound.

Then say as in the last Example,

$$240 : 9 :: 10000$$

$$\begin{array}{r} 9 \\ \hline 24 \overline{) 10000} \end{array}$$

.180

.120

0 Remains.

In this Example, because I had 4 Cyphers in the third Number,

Number, therefore I must prick 4 Places off toward the Right-hand of the Quotient for Decimals; but because the said Quotient did but consist of 3 Places, therefore I supply the fourth to the Left-hand with a Cypher.

Note, That the greater your third Number is, the nearer do you bring your Decimal to Truth, when any Thing happens to remain, as in the Example following; but in most Cases where the Decimal is not to be multiplied by a great Number, it is sufficient that the fourth Number be 1000.

But when you reduce $\frac{1}{4}$ or $\frac{1}{2}$ or $\frac{3}{4}$ to Decimals, or any Number of Shillings to the Decimal of a Pound, it is sufficient in these Cases if your third Number be 100.

Example. How is 3 Farthings wrought in the Decimal Fraction of a Pound Sterling?

$$960 : 3 :: 100000$$

Work, as in the Margin, by the Rules given in the last Example, and you will find the Answer to be .003125, or 3125 Hund. thousand Parts of a Pound.

$$\begin{array}{r} 3 \\ \overline{) 300000} \quad l. \\ \underline{300} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \text{ Remains.} \end{array}$$

Example. How is 12 Pound expressed in the Decimal of 112, or one Hundred Gros Weight?

The Vulgar Fraction by the last Example is $\frac{12}{112}$ Hundred, therefore the Decimal is .1071, as followeth.

$$112 : 12 :: 10000$$

$$\begin{array}{r} 12 \\ \overline{) 120000} \quad l. \\ \underline{120} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

48 Remains, which is inconsiderable, being less than $\frac{1}{10000}$ of a Unit.

Example.

Example. *How is 13 Shillings in the Decimal of a Pound?*
 In a Vulgar Fraction 13 Shillings is $\frac{13}{20}$ l. and in a Decimal .65l.

$$20 : 13 :: 100$$

 13

$$20 \overline{) 1300} \text{ (.65 Answer.}$$

 110

 0 Remains.

Example. *What is 14s. 6d. in the Decimal of a Pound?*

In 14s. 6d. are 174d. and the Decimal (by the second Example) is .725l. for

$$240 : 174 :: 1000$$

 174

$$240 \overline{) 174000} \text{ (.725l. Answer.}$$

 600

 1200

 0 Remains.

Note, That you may, by the Rule following, write down any Number of Shillings in the Decimal of a Pound, without any Proportion.

Rule.] If your Shillings are an even Number, half of them is the Decimal of a Pound.

Thus 14s. is .7l. 16s. is .8l. &c. Likewise 13s. or 130 is .65l. 15s. or 150 is .75l. &c.

You may likewise write down any Number of Pence or Farthings in the Decimal of a Pound, without working by the foregoing Rules.

For if you reduce the given Pence into Farthings, and place a Cypher to the Left-hand, you have the Decimal of a Pound required; but if the said Farthings exceed 14, you may add one (for Reasons given in the next Case) and another for each 39 Farthings.

Thus 3d. is .012l. 9d. is .037l. 11d. is .046l. &c.

Case.] When it is required to find the Value of any Decimal.

Rule.]

Rule.] Multiply the Decimal given, by such a Number of Units of the next inferior Denomination, as make a Unit of that your Decimal is of, and prick from the Right-hand of the Products so many Places as your Decimal consisteth of: So those towards the Left-hand of the said Point or Prick are Integers; and those to the Right-hand of it, are Parts of a Unit of those Integers.

Example. What is the Value of .1071 of a Hundred?
See the Operation.

.1071 Hundted. } Multiply.
4 Quarters in a Hundred. }

.4284 Quarters of a Hundred. } Multiply.
28 Pounds in a Quarter. }

34272
8568

£. 11 .9952 Parts of a Pound.

Note, That if you consider the Denominator of your Decimal to be 1000, you will find this Way of discovering the Value of a Decimal Fraction to differ nothing from that of a Vulgar Fraction, because, by cutting off 9952, you divide 11.9952 by the Denominator.

In the last Example you see, that the Value of .1071 Hundred is 11 Pound; and the Parts being another Pound wanting less than a hundred Part of a Unit, you may call the Value 12 Pound. And,

Note, That as often as the Decimal (as in the last Example preceding) is above .75, in the lowest Denomination, you may call it a Unit.

Example. What is the Value of .747 of a Pound Troy?
See the Work.

.747 Parts of a Pound. } Multiply.
12 Ounces in a Pound. }

1494
747

Ounces 8.964 Parts of an Ounce.

Ounces

Ounces 8.964 Parts of an Ounce
20 Penny-weights in 1 oz. } Multiply.

Penny-weights 19.280 Parts of a Penny-weight.
24 Grains in 1 pwt. } Multiply.

112
56

Grains 6.720 Parts of a Grain.

So that by the Operation you may perceive, that the Value of .747lb, is 8 Ounces, 19 Penny-weights, 6 Grains, and about $\frac{1}{4}$ of a Grain.

Example. *What is the Value of .9184 of a Pound Sterling?* Answer, 18s. 4d. 19.

.9184 Parts of a Pound.
20 Shillings in a Pound. } Multiply.

Shillings 18.3680 Parts of a Shilling.
12 Pence in a Shilling. } Multiply.

.7360
3680

Pence 4.4160 Parts of a Penny.
4 Farthings in 1 Penny. } Multiply.

Farthings 1.6640 Parts of a Farthing.

Note, That the Value of a Decimal of a Pound, as in the last Example, may be found by Inspection, by this

Rule.] Double the Figure standing next the Pound in the Decimal given, and if the next Figure towards the Right-hand the aforesaid Figure, is 5 or more, add 1 to the Product: Then what Figure stands in the second Place, above or under 5, reckon so many Tens of Farthings; and what stands in the third Place from the Point is so many Farthings; which, as often as they are above 13, make less by 1, or above 39, less by 2. So .347l. is 6s. 11 $\frac{1}{4}$, &c.

The Reason of this Rule.

That Place in a Decimal Fraction next the Priek, is called

called *Primes*, being so many tenth Parts of a Pound ; Now $\frac{1}{10}$ of a Pound being 2 Shillings ; therefore whatever Figure possesseth that Place, must be multiplied by 2.

The Reason why you add 1 to the Product, as often as the second Figure from the Prick is 5, or more, is because .05 of a Pound is 1 Shilling ; for if .1 *l.* be 2 Shillings, then Half .1, which is .05, must be 1 Shilling.

Lastly, Your reckoning the second and third Places from the Prick so many Farthings, supposes 1000 Farthings in a Pound ; and there being but 960, that Rule must be something erroneous, but it is near enough the Truth for ordinary Practice ; especially, if for the 40 Farthings, which the 1000 exceeds the 960, you make this Allowance, of deducting 1 at every 25 ; for if 1000 is 40 too much, 500 is 20 too much, 250 is 10 too much, 50 Farthings is 2 Farthings too much, and 25 is 1 Farthing too much ; so that your Computation for 13 Farthings, is half a Farthing too much ; and if you deduct a Farthing at all Decimals between 13 and 38 or 39, it may be near enough ; for less than a Farthing is never received or paid in *English* Coin. Thus, I hope the Rule is made plain, and by it you will find .750 is 7 Tenths of a Pound, or 14 *s.* and .050 *l.* or 50 Farthings made less by 2, for the Reason aforesaid, is 48 Farthings, or 1 Shilling more, which makes 15 *s.* also .194 *l.* is 1 Tenth of a Pound, or 2 Shillings, .050 *l.* or 1 Shilling more, which makes 3 *s.* and 44 Farthings (the 9 being 4 above 5) made less by 2, for the Reason aforesaid, is 10d. $\frac{1}{2}$. So the Value is 3 *s.* 10d. $\frac{1}{2}$.

Addition.

There is no Difference between Addition of Decimals, and whole Numbers of one Denomination ; observing only to place the Decimals Point under Point, as in the Examples, and prick so many off the Sum, as are in the greatest Number of Places in the Decimal given.

Example.

46.9765 *l.*

360.146

41.007

72.9

521.0295 Total.

Example.

.39462

.0013

.99

.176

1.56192 Total.

M

Example.

.789

.3642

.153

.9761

2.2823 Total.

The

The Reason of this Rule.

The Reason of adding Decimals thus, will appear from that of Vulgar Fractions, after they are reduced to a common Denominator, in which Decimals always are the Denominator to the Decimal of the most Places, being the common Denominator, which is the Divisor, and the Sum of the Numerators is the Dividend.

Subtraction of Decimals.

Place the Numbers as in *Addition*, and proceed as in Subtraction of whole Numbers of one Denomination.

<i>Example.</i>	<i>Example.</i>	<i>Example.</i>
From 39.0049 Take 7.947 Rem. 31.0579	From 160.99 Take 94.8462 Rem. 66.1438	From 389.0 Take 0.346 Rem. 388.654

This Rule is the very same with that in Vulgar Fractions; Decimals always having a common Denominator, as is said before; so that the Difference between the Numerators or Numbers given, is the Numerator of the Answer, as in Vulgar Fractions. *N. B.* To supply the vacant Places or Figures you put or imagine Cyphers.

Multiplication of Decimals.

In this Rule you are to place the Factors, and work as in whole Numbers: But after you have found the Product, observe this *General*

Rule.] As many Decimal Places as you have in both the Factors, so many Places must you prick off towards the Right-hand of the Product. And if so many Places happen not to be contained in the said Product, (as it will happen when you multiply two Fractions together that are of little Value) you are to make up the Number by adding Cyphers toward the Left-hand of the said Product.

The Reason of this Rule is plain, it differing nothing from that given for multiplying Vulgar Fractions; for by multiplying the Sums given together, you multiply the Numerators; and by cutting off as many as are in both Decimals given, you multiply the Denominators, and divide that of the Numerators by the Product of the Denominators. Thus, to multiply $\frac{1}{2}$ by $\frac{3}{4}$, is the same as .75 by $\frac{3}{4}$, and

The YOUNG-MAN's Companion. 243

and 100 by 10, viz. $\frac{75}{100}$ by $\frac{5}{10}$, for 5 Times 75, is 375 ;
and 10 Times 100 is 1000 : So the Product is $\frac{375}{1000}$, or
.375.

Example.

Example. Multiply 3.467
by 19.01

3467
31203
3467

Product 65.90767

Multiply .36492
by .032

72934
109476

Product 1167.744

Example.

Example. Multiply .13461
by 42

26922
53844

Product 5.65362

Multiply .1264
by .247

8848
5056
2528

Product .0312208

Example.

Example. Multiply .01832
by 007

Product .00012824

Multiply .048
by .12

Product .00576

Division.

Division is the same with that of whole Numbers ; all the Difficulty thereof is, to know how many Decimal Places to prick off towards the Right-hand of the Quotient : For which take this

Rule.] Take Notice how many Decimal Places you have in the Dividend, and how many in the Divisor ; and as many as the Difference is, so many Places must you prick off to the Right-hand of the Quotient : But if so many Places be not in the Quotient, as the said Difference, make up the Number by prefixing Cyphers toward the Left-hand.

Decimal Fractions may also be divided as Vulgar ; as,

Example. Divide 12.43210 by 9.465. See the Operation.

9.465) 12.43210 (1.31

29671

12760

Remains 3295

Note, That in this and most other Examples in Division of Decimals, it will be necessary to place Cyphers toward the Right-hand of the Dividend; and that you may know what Number of Cyphers to put to the Right-hand of any Dividend, observe this

Rule.] Consider how many Decimal Places you would have in the Quotient, (as 3 is sufficient, if it is not afterward to be multiplied by any Thing) and also how many Decimal Places you have in your Divisor, and make so many Decimal Places in the Dividend, by adding Cyphers, if Need require; as in the Example, where 3.46 is divided by 1.47; and because I would have 3 Decimals in the Quotient, and there are 2 in the Divisor, I must make 5 Decimal Places in the Dividend.

1.47) 3.46000 (2.353

520

790

550

109 Remains.

Which being less than 1 thousandth Part of a Unit, is not material. So much for *Division*.

The *Golden Rule* is the same with that in whole Numbers, observing Multiplication and Division of Decimals, as they are already taught,

*Of MEASURING.**The Explanation of the Circle A B C K.*

NOTE, That the outward Edge of the Circle is called the Circumference, and the Line *AEC*, that cutteth the Circle into two equal Parts, is called the Diameter.

To

Multiply the 7 (of the Fraction) thus; saying 7 Times 1 is 7, and the three above makes 10, set down a Cypher, and carry 1. Lastly, 7 Times 3 is 21, and 1 that I carried, is 22, which makes the Product 220.

Example. $31 \frac{3}{7}$

22) 220 (10 Inches Diameter.

Product 220

22

0

A Circle 10 Inches Diameter, what is the Circumference?

22 7) 220 ($31 \frac{3}{7}$ Inches Circumference.

10

21

220

10

7

3

How many superficial or square Inches are in a round Table?

Multiply Half the Circumference by Half the Diameter, the Product is the Content. Or,

Multiply the Diameter into or by itself, and that Product by 11, and the last Product divide by 14, the Quotient gives the Content.

Thus $7 \frac{1}{2}$ } Diameter.

49

11

49

49

539

14) 539 ($38 \frac{1}{2}$ Inches.

42

119

112

7

Or, Multiply the Inches of the Circumference $AGBC$ K into or by itself, and that Product by 7, and the last Product divide by 88, the Quotient gives the Content in superficial or square Measure. *N. B.* The Sum is thus:

22 Circumference.

22

44

44

484

7

88) 3388 ($38 \frac{1}{2}$ or $\frac{1}{2}$, as above 33

264

748

704

44

Or thus,

11 Half the Circumference,

$3 \frac{1}{2}$ Half the Diameter.

33

$5 \frac{1}{2}$

Product $38 \frac{1}{2}$, as above.

Of Measuring round Timber.

Co. Inches.	Length.		Co. Inches.	Length.	
	Pts.	F. In. 100		Pts.	F. In. 100
Compass of the Tree or Column in Inches.	56	0 6 92	79	0 3 48	
	57	0 6 65	80	0 3 39	
	58	0 6 45	81	0 3 29	
	59	0 6 24	82	0 3 22	
	60	0 6 03	83	0 3 17	
	61	0 5 84	84	0 3 08	
	62	0 5 65	85	0 3 00	
	63	0 5 48	86	0 2 92	
	64	0 5 31	87	0 2 84	
	65	0 5 14	88	0 2 77	
	66	0 4 99	89	0 2 71	
	67	0 4 84	90	0 2 66	
	68	0 4 69	91	0 2 62	
	69	0 4 49	92	0 2 55	
	70	0 4 43	93	0 2 49	
	71	0 4 31	94	0 2 45	
	72	0 4 19	95	0 2 40	
	73	0 4 08	96	0 2 36	
	74	0 3 96	97	0 2 31	
	75	0 3 86	98	0 2 26	
	76	0 3 76	99	0 2 21	
77	0 3 67	100	0 2 17		
78	0 3 57	101	0 2 13		

Look in the Column over which is set Co. (for Compass or Circumference) for 56 Inches, against which stands, 0 6 92, that is, no Feet, 6 Inches, and 92 hundredth Parts of an Inch, and so much in Length of the Stick or Stone makes a Foot solid.

Of Measuring Board or Glafs.

Breadth		Length		
Fe.	In	Fe.	In.	Pts.
0	1	12	0	0
0	2	6	0	0
0	3	4	0	0
0	4	3	0	0
0	5	2	4	8
0	6	2	0	0
0	7	1	8	6*
0	8	1	6	0
0	9	1	4	0
0	10	1	2	4
0	11	1	1	1
1	0	1	0	0
1	1	0	11	1*
1	2	0	10	3*
1	3	0	9	6
1	4	0	9	0
1	5	0	8	5*
1	6	0	8	0
1	7	0	7	6*
1	8	0	7	2
1	9	0	6	8-
1	10	0	6	5-
1	11	0	6	2-
2	0	0	6	0
2	1	0	5	8*
2	2	0	5	5-
2	3	0	5	3-
2	4	0	5	1-
2	5	0	5	0*
2	6	0	4	8
2	7	0	4	6-
2	8	0	4	5
2	9	0	4	4*
2	10	0	4	2-
2	11	0	4	1-
3	0	0	4	0

The Use of this Table.

Suppose that a Board, or Pane of Glafs be 7 Inches broad ; look for 7 in the first Column, and right against it is 1 Foot, 8 Inches, and 6 Tenths of an Inch in Length to make a Foot.

N. B. Some few of these Numbers are a small Matter too much, and others a small Matter too little, but both are sufficiently near the Truth for any practical Business. — Those mark'd (*) are too much, those marked (-) are too little, and those without Marks are quite exact.

Of Measuring Squares Timber.

Square. Fe. In.	Length. Fe. In. Pts.
0 6	4 0 0
0 7	2 11 3
0 8	2 3 0
0 9	1 9 3
0 10	1 5 3
0 11	1 2 3
1 0	1 0 0
1 1	0 10 2
1 2	0 8 8
1 3	0 7 5
1 4	0 6 7
1 5	0 5 9
1 6	0 5 3
1 7	0 4 8
1 8	0 4 3
1 9	0 3 9
1 10	0 3 5
1 11	0 3 2
2 0	0 3 0
2 1	0 2 8
2 2	0 2 5
2 3	0 2 4
2 4	0 2 2
2 5	0 2 1
2 6	0 1 9
2 7	0 1 8
2 8	0 1 7
2 9	0 1 6
2 10	0 1 5
2 11	0 1 4
3 0	0 1 3

Of Measuring Brick Walls.

Height. Feet.	Length. Fe. In.
1	272 3
2	136 1
3	90 9
4	68 0
5	54 5
6	45 4
7	38 9
8	34 0
9	30 3
10	27 2
11	24 8
12	22 7
13	20 11
14	19 5
15	18 2
16	17 0
17	16 0
18	15 2
19	14 4
20	13 7
21	13 0
22	12 4
23	11 10
24	11 4
25	10 11
26	10 6
27	10 1
28	9 9
29	9 5
30	9 1

The Use of this Table.

The Use of this Table.

If a Piece of Timber is a Foot 2 Inches square, look it in the first Column, and right against it, in the second Column you will find 2 Inches, 5 tenth Parts of an Inch in Length, makes a Foot Solid, or 1728 Inches.

A Wall 9 Feet high, 30 Feet, 3 Inches make a Rod in Length thereof, &c. Again, if a Wall or House-side be 22 Feet high, how much in Length thereof will make a square Rod? Find 22 the Height, in the first Column, and against it, in the second Column, you will find, that 12 Feet and 4 Inches in Length thereof make a square Rod or Perch, of 16 Feet and a half both Ways.



The Use of Gunter's Line.

THIS Line is commonly set on the Carpenters Plane Rule, and is somewhat like the Figure in the Margin : It is two Lines, one set at the End of the other, to be used with Compasses.

How to prove the Line by the Compasses.

The Extent from	1 to 2	is equal to the Distance from	2 to 4
	5 to 10		4 to 8
	4 to 8		3 to 6

How to number upon the Lines.

Note, That the Figure 1, 2, 3, 4, 5, 6, 7, 8, 9, sometimes signify themselves alone, sometimes 10, 20, 30, &c. sometimes 100, 200, 300, &c. sometimes 1000, 2000, &c.

To find 134 on the Line.

For the 100, take the Figure 1 on the Middle of the Line; for the 30, take 3 of the great Divisions; and for the 4, take 4 of the smallest Divisions; and you will find the Point to be over against 14 Inches and 3 eighth Parts.

To find 750 on the Line.

For the 700, take the Figure 7 on the Line; for 50, take 5 of the great Divisions, and that's the Point.

To find 12 on the same Line.

Take the Figure 1 for 10; and for the 2, take 2 of the large Divisions; and that is the Point (or Center so called) to set one Point of the Compasses. In measuring Board or Timber, a Line of two Feet long, and Compasses a Foot long is best.

Note, It would much shorten the Work, if the Measure, whether it be Inch, Foot, Yard, Pole, or the like, that you measure with, was divided into 10 equal Parts, and each 10th divided (or supposed to be divided) into 10 other Parts, as Occasion should require; but on the Carpenters Rule the Foot is divided into 12 Inches, and the Inch into 8 Parts.

Observe likewise, That if this Point of your Compasses fall off the Line in your Work, remove it to the same Figure or Place on the other Line; and the least Extent of the Compasses is commonly the best.

Multiply

Multiplication by the Line.

Multiply 5 by 7. Set one Foot of the Compasses in 1, and extend the other to 5 upwards with that Extent; place one Foot in 7, and the other Foot will fall upon 35, the Product or Answer.

Divide 63 by 3. Extend from 3 to 1 downwards, that Extent will reach the same Way from 63 to 21, the Quotient or Answer.

Note, In multiplying always extend upwards, that is, from 1 to 2, 3, &c. but in dividing extend downwards.

Divide 228 l. amongst 16 Men.

Extend from 16 to 1 downwards, that Extent will reach the same Way from 228 l. to 18 l. for each Man.

Divide 750 l. amongst 25 Men.

Extend from 25 to 1 downwards, that Extent will reach the same Way from 750 l. to 30 l. for each Man, the Answer.

When a Bushel of Wheat is worth 3 s. 4 d. or 40 d. the Penny Wheaten Loaf should weigh 20 Ounces: What shall a Penny Wheaten Loaf weigh, when Wheat is 5 s. or 60 d. the Bushel?

Extend from 60 (the Pence in one Bushel) to 20 downwards, that Extent the same Way will reach from 40 to 13 Ounces, and $\frac{1}{3}$ of an Ounce, the Answer.

If a Bushel of Rye cost 3 s. what will 40 Bushels cost?

Extend from 1 to 3 upwards, that Extent will reach the same Way from 40 to 120 Shillings.

If a Bushel of Malt cost 3 s. 6 d. what will 40 Bushels cost?

Extend from 1 to 3 and an Half upwards, that Extent will reach the same Way from 40 to 140 Shillings.

If 136 Masons in a Month be able to build a Fort, and such Expedition is required, that it must be finished in 8 Days, how many Men must be employed upon that Work?

Extend from 8 upwards to 136, that Extent will reach the same Way from 28 to 476 Masons.

C R O S S M U L T I P L I C A T I O N.

WHICH is multiplying Feet and Inches together, is a very ready Way to measure Buildings, as Walling, Tiling, Plaistering, Land, and presently learnt.

One Example is sufficient; as,

Let the Length of any Wall, Flooring, Tiling, Paving and the

252 *The YOUNG MAN's Companion.*

the like, be 9 Feet 3 Inches one Way, and 7 Feet 6 Inches the other.

First, Upon Paper I set the Length and Breadth, with a Cross between them; as in the Margin.

2dly, I multiply Feet by Feet, as 7 Times 9 is 63, which I set under the first Line.

3dly, Then I multiply (as the Cross directs) saying, 6 Times 9 is 54, which I divide by 12 always. Thus,

$$\begin{array}{r} 12) 54 \text{ (4 Feet, and the Remainder} \\ \quad 48 \quad \text{is 6 Inches, which I} \\ \hline \quad \quad 6 \quad \text{set under 63—0.} \end{array}$$

F.	In.
9	3
X	
7	6
63	—0
4	—6
1	—9
0	—1 $\frac{1}{2}$
69	—4 $\frac{1}{2}$

4thly, I multiply cross again, saying, 3 Times 7 is 21, which being small, for it is one 12 and 9, *viz.* 1 Foot 9 Inches, is to be set in the Margin. Thus far is well enough for measuring Buildings.

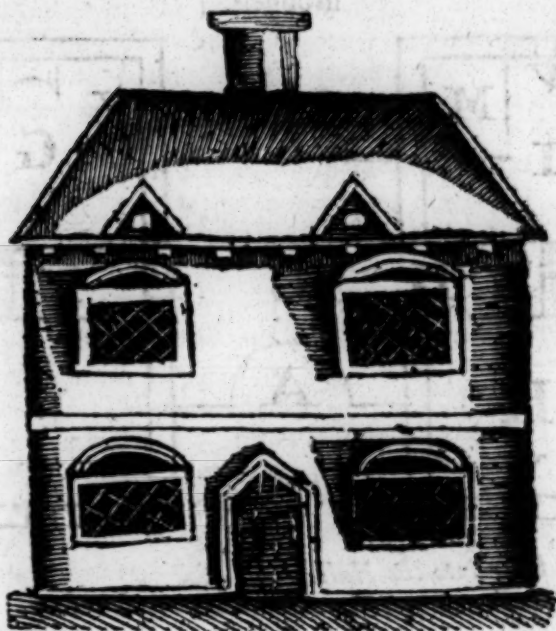
But for more Exactness, you may multiply the Inches together, as 3 Times 6 is 18, but every 12 here is but an Inch, so I set down 1 Inch, and the 6 that remains of the 18, is Half an Inch: The whole being added together, gives for the Answer, 69 Feet 4 Inches and a Half.

Note, That if you were to reduce the 69 Feet, or any other Number of Feet into Yards, divide it by 9, the Feet square in a Yard, and the Quotient shews the Yards.

Now by this Rule you may measure the Ground-Plat for to build a House upon: Divide the Ground into Triangles, and suppose it contains 1606 Feet, divide it by 272 $\frac{1}{4}$ (the Feet in a square Perch or Pole) omitting the $\frac{1}{4}$, and the Quotient is 5 Perches, and the remaining 246 Feet divide by 68 (the Feet in a Quarter of a Perch) and the Quotient is 3 Quarters, and 42 Feet remaining, which divide by 34, (the Feet in Half a Quarter of a Perch) and 8 Feet remain: So that the Contents of the Ground Plat is 5 Perches, 3 Quarters of a Perch, one Half Quarter, and 8 Feet.

So that to purchase such a Piece of Ground, or Land worth 20 *l.* an Acre, would cost but about 14 *s.* for every square Yard thereof is not worth quite a Penny, *viz.* 9 Feet thereof.

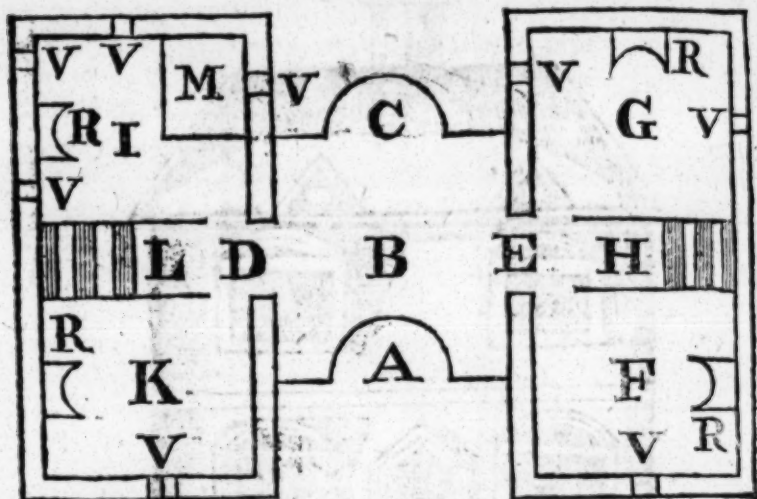
The



The Charge of building a House, like the Figure above, of two Bays, the Length about 34 Feet, Breadth 18, and the Height to the Eaves, 16 Feet. Being a Frame of Wood, the Workman finding all Materials, after the Rate of 33 s. the Square of 10 Feet for the Frame, and 40 s. the Square of Tiling, the Squares of 3 and 5 Inches square of good white Oak, as also the Studs in Proportion, with Window-Frames and Doors, the two Chambers and two Garrets boarded Floors, and the lower Room paved with Brick, Clay Walls between Studs, and over that, Lime and Hair, within and without Doors, except the Front of the House, which should be lathed, and rough cast, a handsome Porch, and a little Bay on the Back of the House for a Buttery, and a Chamber; the Charge may come to 70 Pound.

But if you was to build it of Brick, viz. each Bay 14 Foot square, the first Story two Bricks thick, and 10 Feet high, the second Story one Brick and a Half, 8 Feet high, the Doors and Windows arched over, and the Front rubbed, may come to about 8 Rod, at 6 l. the Rod, which is 48 l. but before it is finished it may cost almost as much more, if you make every Room handsome.

A Platform, or Foundation for a House, Cross-Bays being strongest.



A The Door into the Hall.

B The Hall.

C The Door going into the Garden.

D The Steps into the Kitchen.

E The Steps into the Parlour.

F The great Parlour.

G The little Parlour.

H The great Pair of Stairs leading into the Dining-Room: over the Hall and Parlour.

I The Kitchen.

K The Brew-house.

L The Back-stairs.

M A Pastry, or Milk house, or to set Beer in, if it be the North-side of the House.

R The Chimneys.

V's The Windows.

Of CARPENTERS Work.

THEIR principal Work (where Brick or Stone Houses are built) is Flooring, Partitioning, and Roofing: All which are measured by the Square of 10 Feet both Ways; so that every 100 square Feet is called a Square; but where Houses are wholly framed out of Wood, the Carpenters (out of the Owners round Timber) will frame and

and set up a House at 7 or 8 s. the Square. The straighter the round Timber is, the less in Building.

A Load of round Timber being 50 Feet, it loseth by the Slabs and Sawing 6 or 7 Feet. Build it with white Oak, not red, having lain cut up two or three Years, or more.

To measure the Side of a House, or Roof, is done by the general Rule before; as, suppose the Product of one Side be 326 Feet, that is, 3 Squares and 26 Feet.

A Gabel is measured as the Triangle *E.E.K*, in the Circle before.

Note, That in the Square of Partitioning they reckon the Door Frames; and that Windows roofed into the Roof, are not singly measured, but go into the plain Square; and it is accounted amongst Workmen, to take up no more Timber than if they were no such roofed little Windows; nor do they deduct for Sky-Lights, and Holes for Chimney-Shafts, and the Funnels for great Chimneys may be 14 or 15 Inches within, and for Chamber-Chimneys 10 or 11 Inches.

Board is measured by the General Rule, some multiply the Length in Inches by the Breadth, and divide the Product by 144, (the Inches in a square Foot) the Quotient gives the Feet by the Line upon the Carpenters Rule, commonly called *Gunter's Line*.

How many square Feet are there in a Board 9 Inches broad and 16 Feet long? Extend from 12 (called the Center) to 9 downwards, that Extent will reach the same Way from 16 to 12 Feet. Answer 12 Feet.

How many square Feet are there in a Board or Table 36 Inches wide, and 10 Feet long? Extend from 12 (the Center) to 36 upwards, that Extent will reach the same Way from 10 to 30 Feet. Answer 30 Feet.

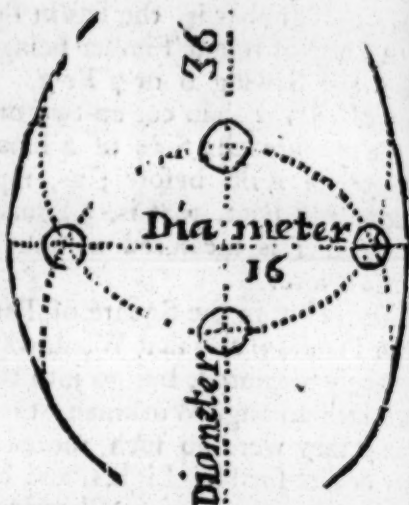
Note, That the Extent upwards (as from 1 to 2, 3, &c.) was because the Table was above 10 Inches wide; and when a Board is wider at one End than the other, measure the Breadth in the Middle, or the Breadth of both Ends added together, take Half that Sum from the Breadth.

Or, A Table of 532 Inches in Length, and 49 Inches in Breadth multiplied together, gives 26068 square Inches, which divide by 144, gives 181 Feet, 4 Inches, for the Answer.

To measure an Oval Table, or Ellipsis, as suppose the Length be 36 Inches, and the Breadth 16.

Extend

Extend the Compasses on the Line from 16 to 36, the Midway of that Extent is the mean Diameter; having the Diameter, measure it by the Example of the large Circle before, or multiply the longest Diameter, by the shortest, and the Product multiply again by 11, and the last Product divide by 14, and the Quotient is the Answer in Inches.



Let the Circle A B C D (before) represent a Globe, or Bullet, how many superficial Inches are therein?

First, Knowing the Circumference and Diameter, multiply the Circumference by the Diameter, and it gives the superficial Content.

To know the solid Content of a Globe, or Bullet, in Yards, Feet, or Inches.

Rule 1.] Cube the Diameter or multiply it twice into itself, then multiply that Product by 11, divide the Amount thereof by 21, the Quotient gives the Answer.

Rule 2.] Or multiply the Diameter into the Circumference, and then multiply that Product by one sixth Part of the Diameter, the last Product will be the solid Content required.



Example. Suppose a Globe 21 Inches Diameter was given to find the solid Content.

21	441	9261	
21	21	11	
—	—	—	
21	441	9261	
42	882	9261	
—	—	—	
441	9261	101871	21)

The YOUNG MAN's Companion. 257

21) 101871 (4151

$$\begin{array}{r} 84 \\ \hline 178 \\ 168 \\ \hline 107 \\ 105 \\ \hline 21 \\ 21 \\ \hline 0 \end{array}$$

By the second Rule
As 7 is to 22 so is 21 to 66.

$$\begin{array}{r} 44 \\ \hline 7) 462 \\ \hline 66 \text{ the Circumf.} \\ 21 \text{ the Diameter.} \\ \hline 66 \\ 132 \\ \hline 1386 \text{ the Product.} \\ 3\frac{1}{2} \text{ the } \frac{1}{6} \text{ of the D.} \end{array}$$

Or you may do it thus ;
Multiply 66 the Circumference
by 21 the Diameter

$$\begin{array}{r} 4158 \text{ the Prod. of } 3 \\ 693 \text{ the Prod. of } \frac{1}{2} \end{array}$$

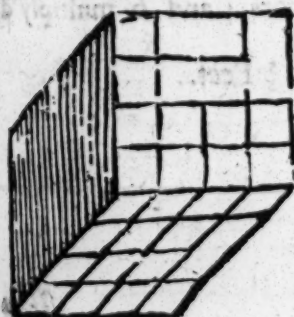
$$\begin{array}{r} 66 \\ 132 \\ \hline \end{array}$$

The Total 4851 is the solid Content in Inches.

6) 1386 divide this Product by 6,
and the Quotient
231 multiply by the Diameter.

$$\begin{array}{r} 231 \\ 462 \\ \hline \end{array}$$

4851 the Product, which is the solid Content in Inches; which divided by 1728, the solid Inches in a Foot, gives 2 solid Feet and 1395 solid Inches, or $\frac{3}{4}$ of a solid Foot and 99 solid Inches, viz. 2 Feet $\frac{3}{4}$ solid, and 99 solid Inches.



Note; That a solid Foot of Timber is 1728 Cube Inches; 864 Inches Half a Foot; 432 Inches a Quarter of Foot.

In a solid Foot are 8 Squares, each six Inches square; in a solid Foot are 64 square Quarters of a Foot; a Board one Inch thick, and

258 The YOUNG MAN's Companion.

and 147 Inches and a little above a Quarter of an Inch round, as a Circle or round Table, contains a solid Foot: A Vessel of about a Foot square may hold about 3 Pecks and 7 Quarts: A Yard square, that is 27 solid Feet, may hold about 22 or 23 Bushels of Wheat: 10 Feet are in a Hoghead, 20 in a Butt.

But such Allowance ought not to be in measuring of Ash, Elm, Walnut-tree, Pear-tree, and the like solid Wood, the Bark being cut off round the Middle of the Stick, where you take the Girt with a String.

Board and Timber Measure by Fractions.

A BOARD of $15\frac{3}{4}$ Inches broad, how many Inches in Length will make a Foot?

Note, $15\frac{3}{4}$ being a whole Number, and a Fraction, must be reduced by multiplying 4 the Denominator, by 15 the whole Number, adding 3 the Numerator, and the Sum 63 will be a new Numerator to the Denominator 4.

Thus $6\frac{3}{4}$ which is an improper Fraction.

$$6\frac{3}{4} \times 144$$

Note, The 144 signifies the square Inches in a Foot; then I multiply Cross-ways, as once 63 is 63, and 4 Times 144 is 576 for the Dividend, and the 63 is the Divisor.

63) 576 ($9\frac{2}{3}$ or $9\frac{1}{3}$ Inches in Length, the Answer,

567

9

If a Board be 6 Feet $\frac{3}{4}$ long, and $8\frac{3}{8}$ broad, how many Square Feet are therein?

$6\frac{3}{4}$ and $8\frac{3}{8}$ being reduced are $2\frac{7}{8}$ and $5\frac{3}{8}$;

Then multiply 27 by 53, and the Product 1431 will be the Dividend, and the Denominators 4 and 6 multiply'd together, make 24 for a Divisor.

24) 1431 ($59\frac{3}{4}$ or $59\frac{3}{8}$ Feet.

120

231

216

15

How

How many Inches of Board are contained in $15\frac{3}{4}$ Inches broad, and $9\frac{3}{8}$ Inches long?

$15\frac{3}{4}$ $9\frac{3}{8}$ reduced and multiplied as before, makes for a new Numerator 36288 to be the Dividend, and 252 for the Divisor.

252) 36288 (144 Inches, Answer.

$$\begin{array}{r} 252 \\ \hline 1108 \\ 1008 \\ \hline 1008 \\ 1008 \\ \hline 00 \end{array}$$

TIMBER Measure.

A Piece of square Timber of $6\frac{1}{2}$ Feet long, and $5\frac{1}{2}$ Feet broad, and $7\frac{1}{2}$ Feet thick, how many solid Feet are there in it?

Reduce the whole Numbers and Fractions severally into improper Fractions, (as before) then multiply the Numerators one into another for a Dividend, and the Denominators for a Divisor.

Example. $6\frac{1}{2}$ Feet, $5\frac{1}{2}$ Feet, $7\frac{1}{2}$ Feet.

Being reduced, makes $13\frac{1}{2}$, $11\frac{1}{2}$, and $15\frac{1}{2}$, which being multiply'd together, make $\frac{6006}{34}$, the 6006 for the Dividend, and the 34 for the Divisor.

24) 6006 ($250\frac{6}{24}$ or $250\frac{1}{4}$ solid Feet, Answer,

$$\begin{array}{r} 48 \\ \hline 120 \\ 120 \\ \hline 06 \end{array}$$

If a Piece of Timber or Brick-Work be $34\frac{1}{4}$ Feet long, $42\frac{1}{3}$ Feet broad, $50\frac{1}{6}$ Feet thick, how many solid Feet? Answer $72737\frac{35}{72}$.

$34\frac{1}{4}$ Feet, $42\frac{1}{3}$ Feet, $50\frac{1}{6}$ Feet.

Being reduced, are $137\frac{1}{4}$, $127\frac{1}{3}$, $301\frac{1}{6}$.

These new Numerators multiplied, are 5237099.

The Denominators multiplied, are 72.

Divide.

Part of the Line on the other Side answering thereto, against which you will find 15 Inches, and about $\frac{1}{2}$ Part.

A Pane of Glas that is 22 Inches broad, how much thereof will make a Foot square?

Look for 22 Inches on the Line, and right against it (on the other Side of the Rule) you shall find 6 Inches, and almost one Half, and so much in Length of that Breadth will make a Foot square.

If a Table or Board be 33 Inches broad, how much in Length will make a Foot square?

Look for 33 Inches on the said Line, and right against it (on the other Side of the Rule) you shall find 4 Inches $\frac{3}{8}$, that is, 4 Inches, and 3 eighth Parts of an Inch, and so much thereof will make a Foot square.

At the other End of the Rule is the Table, called Under-Timber Measure, thus described.

1	2	3	4	5	6	7	8	9
144	36	16	9	5	4	2	2	
0	0	0	0	9	0	11	3	

This Line begins at 8 and an Half, and so goes on (by Divisions) to 30.

The Use.

Fe. In.

If a Piece of Timber be	1	Inches square	144	0	in Length will make a Foot solid.
	2		36	0	
	3		16	0	
	4		9	0	
	5		5	$9\frac{1}{8}$	
	6		4	0	
	7		2	$11\frac{1}{4}$	
	8		2	3	

N. B. On the Rule under 5 there is only stamp'd 5. 9, tho' it should be $\frac{1}{8}$ more; so under 7 Inches square there is only 2. 11 stamp'd, which should be 2. $11\frac{1}{4}$.

Here you may see, that a Piece of Timber that is 4 Inches square requires 9 Feet in Length to make a Foot solid.

The Square of any Piece of Timber at the End thereof being known, to find how much of that Piece in Length will make a Foot solid.

Example.

Example. *A Piece of Timber that is 13 Inches square, how much in Length will make a Foot solid?*

Look for 13 Inches in the Line of Timber-Measure, and right against it, on the other Side of the Rule, you shall find 10 Inches, and somewhat less than a Quarter of an Inch, and so much of that Piece in Length will make a Foot solid, containing 1728 Inches to the Foot; but in a square Foot of Board are only 144 Inches.

N. B. In Timber-Measure you must count the Inches from that End of the Rule that is next your Right-hand, as in the Example above, when you turn the Rule over, you find almost 20 against the 21; which being counted from the Right-hand towards the Left, is almost 4 Inches.

Another. *If the Square of a Piece of Timber be 21 Inches, how much thereof in Length will make a Foot solid?*

Look for 21 Inches in the said Line, and against it you will find, on the other Side of the Rule, almost 4 Inches, if you reckon from the Right-hand towards the Left, and so much in Length will make a Foot solid.

Note, If squared Timber be broader at one End than the other, the usual Way is to add both Ends together, (the true Way for Board Measure) and take Half thereof for the true Square; but if the Difference be very much, this Way is very erroneous, (tho' much practised) which I shall prove by the following Example.

Suppose a Piece of Timber be 9 Inches thick, 15 Inches broad, and 12 Feet or 144 Inches long, how many square Feet are in the same? The Answer will be 12 Feet by the Rule, but the true Content is 11 Feet and $\frac{1}{4}$.

Of BRICKLAYERS Work.

Bricklayers measure their Walls commonly by the Rod of 16 Foot and an Half, (as Land) the Rod containing 272 and a Quarter square Feet upon the Superficies of the Wall.

Their Materials, or Brick, made of a reddish Earth, ought to be dug before Winter, and not made till Spring, to be well seasoned with Frost; the Moulds, according to the Statute, ought to be within Side in Length 9 Inches, in Breadth 4 Inches and a Half, and in Thickness 2 and a Quarter; a Cart Load of Bricks is counted 500, and of Tiles 1000.

It is said, that a square Yard of well wrought Clay will make

make 7 or 800 Bricks, and that out of the Owner's Clay, a Workman for 6 or 7 Shillings the 1000 will make them, without any farther Charge to the Owner.

But if you buy Brick or Tile, chuse such as are of a bright red Colour, and that will ring when knocked; but the blackish glazed Bricks are best for Chimney Stacks.

Note, That the less Water you put to your Lime and Sand, the better will your Morter be, but it will require much more Labour in working it: For Morter to abide bad Weather, mix the Cinder-dust that comes from a Smith's Forge with it.

Digging Clay to make Bricks.

A solid Yard being 27 solid Feet, how many Yards are there in a Pit 18 Feet broad?

8 Feet deep.

27) 2880 (106

27

144
And 20 Feet in Length

180

162

Yards Feet

Answer 106 18

2880 Feet in all.

18

To measure Brick Walls.

Suppose a Wall be in Length 120 Feet, and 13 Feet 3 Inches high, the Product will be 1590 Feet; which reduce into Rods, by dividing it by 272, omitting the $\frac{1}{4}$ of a Foot (as not regarded by Workmen) the Quotient gives 5 Rods, 3 Quarters, 26 Feet.

Note, That 136 Feet is Half a Rod, 68 a Quarter, and 204 Feet, three Quarters of a Rod.

Or, Extend from 272 to 13 and a Quarter of the great Division on the Line downwards, that Extent will reach the same Way, from 120 to five Rods, and above $\frac{4}{5}$ Parts the Answer.

Having measured the Face of the Wall or House, on the Outside thereof, then measure the End thereof on the Inside, and make Deduction for Doors and Windows. *Note,* If the Wall be either thicker or thinner than a Brick and a Half, it must be reduced into Standard-Measure, (that is, one Brick and a Half thick.)

The R U L E.

Multiply the Number of Feet measured on the Face of the

the Wall, by the Number of Half the Bricks the Wall is in Thickness, one third Part of that Product gives the Number of Feet contained in the Wall, which reduce into Rods, by dividing it by 272, as above. By the Line.

How many Rods of Brick-work are there in 4085 Feet?

Extend from 272 to 1 downwards, that Extent will reach the same Way from 4085, to about 15 Rods, Answer. Or thus, divide 4085 by 272, and the Quotient will be 15.

If a Wall be 9 Rods on the Outside, and 5 Half Bricks thick, how many Rods of a Brick and a half are there in the Wall? As 3 is to 5, so is 9 to 15, Answer. By the Rule.

Extend from 3 to 5, that Extent will reach the same Way from 9 to 15 Rods, Answer.

Charge of a Rod of Brick Work. l. s. d.

For 4500 Bricks at 15 s. the 1000 ——— 3 7 6

For 32 Bushels of Lime at 9 d. ——— 1 4 0

For 3 Load of Sand ——— 0 5 0

Workmanship by the Great ——— 1 2 0

L. 5 18 6

Feet in Height.	1 Brick thick.	Brick and half thick
1	0176	0264
2	0352	0528
3	0528	0792
4	0704	1056
5	0880	1320
6	1056	1584
7	1232	1848
8	1408	2112
9	1584	2376
10	1760	2640
11	1936	2904
12	2112	3168
13	2288	3432
14	2464	3696
15	2640	3960
16	2816	4224
17	2992	4488
18	3168	4752
19	3344	5016
20	3520	5280

A TABLE shewing the Number of Bricks, or very near, that a Wall may take up of 16 Feet and a Half long, of any Thickness, and to any Height, not exceeding 20 Feet high.

The Use.

A Wall of under-pinning a Rod in Length, and one Foot high.

Look in the Top of the Table for 1 Foot in the first Column, and against it is 176, shews that so many Bricks will do it, at 1 Brick length thick, and 264 at 1 Brick and a Half thick, as the Table sheweth. At 2 Bricks thick double the Number 176, and so of the rest.

Note,

Note.
Brick W
to prefer

TIL
C

T

For 7

For 1

For t

For H

For 5

For F

For 7

Work

Note,

a Stone

reach fr

as is she

A W

25 s. th

Morter

the Squ

It is

Timber

and tha

Five

Lath 1

A P

broad,

Wh

point i

blowing

there i

and wh

Plain

in Bre

Such a

Note. That all Joysts and Summers, that are to lie in Brick Walls, ought to have their Ends run over with Pitch, to preserve them.

Of TILING.

TILING is measured by the Square or Foot, as the Carpenters Work.

The Charge of a new Square of Tiling.

	<i>l.</i>	<i>s.</i>	<i>d.</i>
For 750 Tiles, at 18 <i>d.</i> the 100	—	0	11 03
For 100 of 5 F. Lath, 7 nail'd in 2 F.	—	0	02 00
For two Bushels of Lime burnt	—	0	01 00
For Half a Peck of Oak Tile Pins	—	0	00 03
For 500 of Reparation Nails	—	0	00 10
For Half a Load of sifted Sand	—	0	01 00
For 7 Ridge Tiles, at 2 <i>d.</i> per Tile	—	0	01 02
Workmanship by the Great	—	0	03 00

Sum *L.* 1 00 06

Note. The readiest Way to measure a tiled Roof is to tie a Stone to the End of a Line, and put it over the Ridge to reach from Eves to Eves, then measure the Line, and work, as is shewed in the General Rule.

A Workman will find all Materials (in some Places) at 25*s.* the Square; or repair old Tiling with new Lath, Morter, and new Tiles where Need is, for about 12*s.* the Square.

It is said, that a straight-grain'd round Piece of Oak-Timber 10 Inches square, may be render'd into 400 Laths, and that a Workman will rend 1000 for 3*s.*

Five Foot Lath is 5 Score to the 100, and four Foot Lath 120 to the 100.

A Piece of Timber (it is said) of 6 Inches and a Half broad, and 3 Inches and a Half thick, cuts 8 Eves Laths.

When the Morter is worn much out of your old Tiling, point it with Lime, Hair, and Sand, to prevent the Wind blowing them off, or Snow driving under the Tiling, for there it lodgeth on the Cieling under the Tiles, (if cield) and when it thaws, may do much Damage to it.

Plain Tiles should be in Length 10 Inches and a Half, in Breadth 6 Inches and a Quarter, in Thickness Half an Inch and Half Quarter at the least.

N

Roof

Roof Tiles in Length 13 Inches, and the Thicknefs Half an Inch and Half Quarter at the least.

Gutter Tiles 10 Inches and a Half in Length, and he that sells any that is not so, forfeits to the Buyer double the Value, and is to be further punished, by 17 *Edw. c. 17.*

Of PLAISTERING.

PLAISTERING or Cieling is measured by the Yard square, or 3 Feet each Way, which is 9 Feet: The Length and Breadth being multiplied together,

To make Rough-cast bluish, work Lead Dust in the Morter, to be had at the Plumbers, and cast small Pebble-Stones on the Plaistering, before it is dry, and when dry colour it.

Note, That if you are about to measure the Plaistering of most of the Rooms in a House, by the General Rule, do thus :

First, Upon a Sheet of Paper draw 4 Columns, as (1) the Name of the Wall, lying East or West, &c. or Gable End ; (the Length in Feet and Inches) and the last Column for the Content in Yards, Feet, and Inches, done from the General Rule.

Having finished every Room, you may (if you will) prove your Work by *Gunter's Line*, thus :

A Wall Cield 4 Feet wide, and 7 Feet long.

Extend always from 9 (the Feet in a square Yard) to 4 the Width given, that Extent the same Way, will reach from 7 to $3\frac{1}{9}$ Yards, the Length, which is the Answer.

Or you may multiply the Length 7 by the Breadth 4, and divide the Product 28 by 9, the square Feet in a Yard, and the Answer will be $3\frac{1}{9}$ Yards, as above.

Note also, In another Place of the Sheet of Paper, make four Columns more, for the several Deductions of Windows, Doors, Chimnies, and Hearths, and the like.

To reduce the several Products of Feet, divide them by 9, and the Quotient gives the Yards to be placed in the last Column.

Note, That Pricks between Studs will not keep out driving Rain, so well as Lathing and Plaistering without Doors.

For 10
For 50
For 2
For 3
Work

THI
sq
Sand, and

which d
Quotient

PIT
Ch
of Pebbl
manship
of the G
Pavin

The

The Charge of a Cieling of 6 Yards.

	s.	d.
For 100 of five Foot Laths	2	00
For 500 of Reparation Nails	0	10
For 2 Bushels of Lime and Sand	1	06
For 3 Pecks of Hair	0	09
Workmanship, with Lathing. 3 d. the Yard	1	06

Sum S. 6 07

PAVING with BRICK.

THIRTY two common Bricks will just cover a Yard square, for which a Workman will find Lime and Sand, and will lay them at 8 d.

9 Inches the Length of a Brick.

$4\frac{1}{2}$ the Breadth.

$4\frac{1}{2}$ the Superficies of 1 Brick.

32 Bricks in all.

80

120

16

1296 the square Inches in 32 Bricks.

Or thus, 36 Inches in a Yard in Length.

36 Inches in a Yard in Breadth.

216

108

1296 the square Inches in a Yard square, which divide by $4\frac{1}{2}$, the Superficies of 1 Brick, and the Quotient will be 32.

Of PITCHING and PAVING.

PITCHING is also measured by the Yard. The Charge of Pitching 8 Yards, viz. a great Cart Load of Pebbles worth 4 s. and a Cart Load of Gravel 2 s. Workmanship 2 d. $\frac{1}{2}$ the Yard ; but there will want more Gravel, if the Ground be not firm.

Paving with Free-stone well smoothed is worth 12 d. or 14 d.

14d. a Foot: But Marble Stone finely polished will cost 2s. 6d. a Foot.

Of JOYNER'S Work.

JOYNER'S Work is measured by the Yard square, the Plaisterers, only where there is a Cornish (in a Room wainscotted) or swelling Pannels, and Mouldings, they take the Depth of the Room with a Line, denting it into the Hollows, and then measure the Line in Feet and Inches for the Height of the Room; and then measure round the Room with a four Foot Lath, (as Plaisterers do for the most Expedition) and multiply the Length and Breadth, as in the General Rule, and the Product divide by 9, and the Quotient shews the Yards, from which deduct for Doors, Windows, and Chimney-pieces, &c.

In measuring Window-Shutters, (in a Room) being all of one Height, they measure the Height of one, and call that the Breadth; and for Length they measure the Breadth of them-together, which are to be multiply'd together, viz. the Length and Breadth, by the said General Rule. Now suppose the Product is 240 Feet 6 Inches.

The Joyner being paid for the Out-side of the Shutters for the whole Work so called; and for plaining the other Side of the Shutters is called Half-Work, to be paid at Half of the Price of the other.

Therefore the said Product for the best Side of the Shutters being 246 Feet 6 Inches, to which add Half thereof for the said Half-Work, makes 369 Feet 9 Inches, to be reduced into Yards by dividing it by 9 as before, and the Answer will be 41 Yards and $\frac{1}{2}$.

The same Way of measuring they observe for Wainscot Doors, and Cup-board Doors, where they are plain'd on both Sides.

Lastly, If the Cheeks or Jambs of three Windows wainscotted, be in Length in the Whole 62 Foot, and the Breadth 5 Inches, done by the General Rule, they make 2 Feet 10 Inches.

Of GLAZIERS Work.

THE Glazing of new Windows is measured by the Foot, plain Glazing 6d. the Foot; new Leading 3d. Repairing 2d. a Foot; single Quarry fixing 1d. the Glazing finding the Quarry.

A Quarry of ordinary Glass (like the Figure mark'd W in the Circle before) is 6 Inches from Corner to Corner

one Way, and 4 Inches the other, containing 12 Inches in all, and therefore 12 Quarries make a Foot.

To measure large square Panes of Glafs, see the Question in Timber-Measure by Fractions.

Note, Let the Panes be rubbed well, when fixed in the Lead, with Linseed Oyl, to keep out Rain.

If you have several Panes of Glafs in one Room, all of one Height, lay a String along the Glafs of the Window, and take the Breadth of all of them together into one Sum, which call the Length; and the Height of one Pane, the Breadth; and work by the General Rule, not deducting for Ovals and half-round or crooked Windows as in Stone-work, for they are all measured as if they were square, because of the Loss of Glafs, and the Trouble in fitting them.

A Foot of new Sheet Lead weighs sometimes 4, 5, 6, 7, 8, or 9 Pounds.

A Yard square of new Sheet Lead is worth more or less, according to its Weight, besides Solder at 9*d.* or 10*d.* the lb. The Exchange of old Sheet Lead for new, is in some Places 3*s.* the 100 Weight.

Of PAINTERS Work.

THEIR Work is measured by the Yard square, but dented-in where the Brush goes.

Painting Wainscott with Oyl Colour, thrice done over 10*d.* the Yard, if Linseed Oyl is not too dear, and 6*d.* the Light for large new Window Frames.

Note, That Linseed Oyl, done over any Timber both within and without Doors, preserves it from Worm and Weather, so as it be done over with a Brush in dry Weather, once every seven Years, without being ground with Colours, as the Glovers grind their Colours for Gloves.

Whites are, Ceruse, Flake-White, and White lead.

Blacks are, Lamp-black, or the Soot that comes by burning Oyl in Lamps, Cherry-stones burnt, or old Ivory Knife Hafts burnt.

Reds are, Red Lead, Vermillions, Red-Oker, Indian lake.

Greens are, Verdigrease, Verditer, and Sap-Green made of the Juice of ripe Buckthorn-berries, and kept in a Bladder.

Yellows are, Saffrons, Yellow-pinks, and Gambogia.

Brown is, Umber burnt.

Gold Colour is Orpiment.

Lastly, Verdigrease, with a very little Sap-Green, makes a right Green Colour.

Note, That all the Colours may be ground (on a Glover's Grinding-stone) with fair Water, severally, and dried and kept in Paper for Use, except Lamb-black, Saffron, Smalt, Gambogia, and Sap-Green.

Blues are, Ultramarine, Smalt, Indico, Blue-bice.

Gum Water: Tie clear Gum Arabick in a Rag, and let it dissolve in a Gallipot of Water.

Size is made by boiling eight Ounces of Glue in two Gallons of Water very well, used to whiten Rooms.

For colouring of Maps, mix a Colour with Gum-Water in a Shell, using a fine Pencil.

Turn'd Chairs you may brush over with Whiting and Size, and after with some other Colour, and after varnish them with this Varnish: Boil 4 Ounces of Gum-Sandrick in a Quart of Linseed Oil till the Gum is dissolved; or only heat the Oyl till thin. You may use it without Doors also; and if the Flame catches it, do but cover it with a Cloth, or the like, and the Flame goes out.

If you would colour Wood of a bright brown Colour, take the hard knotty Soot out of a Chimney where Wood is burnt, and let it dissolve in old Urine: With this brush the Wood while you are turning it for Chairs or Table-Frames, or to do over Wainscot, varnish afterwards.

If you varnish Cloth for Tents with the said Varnish, they will keep out Wet.

To colour a Sign-Post. Grind Spanish Brown and Red Lead thinly with Linseed Oyl, and brush it over: when it is dry use White Lead twice, and if it be not white enough, do it over again. Observe the same for Window-Frames.

Cleanse your Pencils and Brushes (before they are too dry) with hot Water and Soap, and if they are hard and dry, boil them in the same: Keep your Oyl Colour in Bladders tied close; and those in Pots, put them in Water till you need them.

Priming Dial-Boards, is the Brushing them over with Linseed Oyl, thinly ground with Spanish Brown, done over three or four Times (drying between) thicker and thicker of the Colour.

Oyl for Dials: Boil Red Lead and Linseed Oyl and a little Litharge of Gold, a Pennyworth, till it is as thick as a Syrup almost; when it is cold and well settled, pour the clearest into a Bladder, or Glass for Use, and it is called the Fat Oyl.

The

The Gold Size for Dials : Mix fine ground Yellow Oker with the Fat Oyl, so that when a Figure is made with it, it may be of that Thickness as to set itself smooth.

To mark out a Dial upon a Wall : Fix the Dial drawn upon Paper against the Wall with Nails, and you may mark out the Hour-lines to what Length you please ; the Hour-lines may be drawn with Vermillion, or Lamp-black, ground with Fat Oyl.

To draw golden Letters or Figures for the Hours ; first draw them with a Pencil dipped in the golden Size, which, when so dry as they will just stick to your Finger, but none come off, then, with a smooth edged Penknife ; shape the Leaf-Gold to your Mind, and take it up with a Piece of Cotton-Cloth, tied about the End of a Stick, and lay it on the Size, and press it down with the same Cotton ; when it is dry, brush off the loose Gold with a Feather, and the rough Edge of the Letters smooth, with a Pencil dipp'd in red or black Colour.

To take out a Colour out of your Work.

Take a little common Soap and lay on it, and on that a Rag, and it will eat the Colouring, so that you may easily take it out.

RECEIPTS for COLOURS.

A Blue. Temper a little Indico and Smalt with Oyl.

A light Blue. Mix Smalt and White-lead together.

A red Colour. Lamp-black and White-lead, and Marble with it.

A Fox Colour. Umber burnt.

To make a Board red. Do it over twice with *Indian* Red, and when dry'd, do it in the Lights thereof with Vermillion.

Gold Colour. Use Orpiment with the Oyl, tempered with a Knife on an Earthen Platter. No Colour will crack if you put some Oyl of Walnuts to it.

The red Colour above will serve to marble wooden Chimney-Pieces, and when dry, to varnish it with Gum-Sandrick Varnish.

Yellow Colour. Beat Saffron to Powder, tie it in a Rag, and lay it in White Wine Vinegar.

Glare of Eggs. If the Whites are beaten well and set in a Pot one Night, with a Feather dipt therein, you may grind any Colour with it, and paint a printed Picture within

Doors ; but oyl'd Pictures you may varnish over the Fire with Linseed Oyl.

To make Size. Take of the Shreads of Glovers Leather 1 lb. boil it in 2 Quarts of Water to a thin Jelly, and strain it.

Gum Arabick Water. Dissolve it in Water.

Allum Water. Boil 8 Ounces of Allum and a Quart of Water together, for a considerable Time.

Yellow Colour. Soak the yellow Cives in white Lillies in Gum-Water, for some Time.

A red Colour. Vermillion mix'd with Cotton in an Ink-horn with Gum-Water, is proper for many Uses.

Blots out of Writings. Wet them a little with Gum-Water, and scratch them with a Penknife, and rub it with Cotton and Gum-Sandrick, which Gum makes Paper bear Ink well.

Golden Letters to write. Grind Vermillion and Gum-Armoniack with Glare of Eggs.

A Yellow to colour Silk, Thread, Linen, white Leather, Parchment, Paper, &c. Dissolve Gambogia in Allum-Water.

To blue Skins. Boil Elder-berries, and smear the Skins therein, and wring them ; then boil the Berries in Allum-Water, and wet the Skins twice therein, and dry them : Or blue Logwood with Allum-Water.

To dye Linen Cloth, Thread, &c. Red. Dip them in the Liquor that is well impregnated with the Powder of Brazil and Vermillion, of each 1 Ounce, boil'd in a sufficient Quantity of Allum-Water.

To dye Blue. Take Woad 1 lb. mix it with 4 Pints of boiling Water, and infuse Whites in it 24 Hours.

To dye Green. First dye it Yellow, then take 60 Pints of Water wherein Wheat Bran has been soaked 24 Hours, then strain it, and let 3 lb. of Allum be dissolved in it, and boil the Stuff in it for 2 Hours.

To dye Yellow. Take Woad 2 lb. to the said Water, boil it till the Colour is good : But to make the same Stuff Green, put into it the said blue Dye.

To dye a clear Red. Take 60 Pints of Bran-Water made as above, strain'd clear, in which dissolve Allum 2 lb. and Tartar 1 lb. in which boil the Stuff for 2 Hours, then take it out, and boil it in as much fresh Bran-Water, viz. 30 Quarts, to which add Madder 3 lb. perfect the Colour to a moderate Heat without boiling.

To dye a sad Colour. Add Logwood to the Blue above.

To cement broken Glasses. Glare of Eggs ground with Quick-

Quick-lime
and with t
Glue, wi
For bre
ing-stone,
Whites o
those Dis
ground w
will be su
Grease
let it dry
do so till
dip it in

I HAV
trary
acquaint
of Busin
Fraction
Rules o
like a M
This
ing the
Goods
But
Heart.

Par

Farthi

No
dema
In the

Quick-lime, or burnt Flints and Egg-shells, of each alike and with the Whites of Eggs and Gum Sandrick make strong Glue, with which smear the Edges of the broken Dish, &c.

For broken Pots and Dishes. Grind on a Glover's Grinding-stone, with new Lime, Crumbs of old Cheese, and Whites of Eggs, or the Skin of oyl'd Colours : But for those Dishes that only are to stand on Shelves, Wheat-flour ground with the Whites of Eggs, done together speedily, will be sufficient.

Grease upon Woollen. Wet the Stain with Starch, and let it dry ; then rub it, and daub it over again and dry it ; do so till the Grease is out. But if it be Pitch on Woollen, dip it in cold Water, and rub it out by often dipping.

The Rule of PRACTICE.

I HAVE thought it most convenient before this Rule, contrary to the Usage of other Books of this Kind, first to acquaint the Young Man with proper Precedents and Forms of Business ; as also, to give him a tolerable Notion of Fractions and Measuring : That when he comes to these Rules of *Practice*, he may readily and practically proceed like a Man in real Business.

This Rule is indeed of the greatest Use and Service, being the readiest and shortest Way of casting up most Sorts of Goods or Merchandize.

But it is first necessary to have the following Tables by Heart.

Parts of a Shilling, and of a Pound. Parts of a Pound.

d.			s.	d.
6	is $\frac{1}{2}$	— — — $\frac{1}{40}$	10	0 is $\frac{1}{2}$
4	$\frac{1}{3}$	— — — $\frac{1}{60}$	6	8 $\frac{1}{3}$
3	$\frac{1}{4}$	— — — $\frac{1}{80}$	5	0 $\frac{1}{4}$
2	$\frac{1}{5}$	— — — $\frac{1}{120}$	4	0 $\frac{1}{5}$
1 $\frac{1}{2}$	$\frac{1}{3}$	— — — $\frac{1}{60}$	3	4 $\frac{1}{6}$
1	$\frac{1}{4}$	— — — $\frac{1}{80}$	2	6 $\frac{1}{8}$
	$\frac{1}{5}$	— — — $\frac{1}{100}$	2	0 $\frac{1}{10}$
	$\frac{1}{6}$	— — — $\frac{1}{120}$	1	8 $\frac{1}{12}$
	$\frac{1}{8}$	— — — $\frac{1}{160}$	1	0 $\frac{1}{20}$
Farthings	$\frac{3}{4}$	$\frac{1}{16}$		
	$\frac{1}{2}$	$\frac{1}{8}$		
	$\frac{1}{4}$	$\frac{1}{4}$		

Note, That this Rule gives the Price of one Thing, and demands the Value or Amount of many of the same Sort : In the Example following, the Price of one Pound is given,

N 5

and

274 *The YOUNG MAN'S Companion.*

and the Amount of 426 is required ; therefore observe to change in your Mind, the Name of the Species given, and call it so many Six-pences, Shillings, Groats, Pence, Pounds, &c. of Money, as the Price of one of the given Yards, Pounds, Hundreds, &c. are ; as in the Example following it will be : How much comes 426 Six-pences to ?

Parts of a Shil.

6d. is $\frac{1}{2}$ |
of 1s. |

Example.

426 Pounds of Sugar, at 6d. per lb.

2|0) 21|3

L. 10|13s. Answer.

Because 6d. is the given Price of each lb. now 6d. being the Half of a Shilling ; therefore the Half of 426 is taken, and gives 213s. which divided by 20, the Shillings in a Pound Sterling, gives 10l. 13s.

Example. 512lb. of Cheese, at 4d. per lb.

4d. is $\frac{1}{3}$ |
of 1s. |

2|0) 17|0—8d.

L. 8 10 8 Answer.

Here 4d. is $\frac{1}{3}$ of a Shilling ; therefore the third Part of 512 is 170s. and $\frac{2}{3}$ of a Shilling, or 8d. remains.

Note, Always what remains is of the same Name with the Dividend, which here is Groats, for the Pounds of Cheese are at a Groat each, so that it is 512 Groats.

Example. 246 Yards of Ribband, at 3d. per Yard.

3d is $\frac{3}{4}$ |
of 1s. |

2|0) 6|1— $\frac{2}{4}$ of a Shilling, or 6d.

L. 3 1 6 Answer.

Here the Yards are divided by 4, because 3d, is the 4th of a Shilling ; and it quotes 61 Shillings, and 2 remains, or two 3 Pences : So the Answer is 3l. 1s. 6d.

And thus may any proposed Question be answered, belonging to the first Table, or Parts of a Shilling ; that is, by dividing the given Number by the Denominator of the Fraction, and the Quotient will be always Shillings, which (the Remainders being known as above) bring into Pounds, by dividing by 20, &c.

When

When the Price of the Integer is at a Farthing, a Half-penny, or three Farthings, more than the Price of Pence mentioned, then for those Farthings take their even Part of the foregoing Quotient, taken for the even Parts of a Shilling, and add them together, as in the following Example.

Example. 249 Ells of Canvas, at $4d. \frac{1}{2}$ per Ell.

$4d.$ is $\frac{1}{3}$ of $1s.$ | 83 0 the Value at $4d.$ per Ell.
 $\frac{1}{8}$ is $\frac{1}{8}$ of $4d.$ | 10 4 $\frac{1}{2}$ the Value at $\frac{1}{2}$ per Ell.

20) 913 4 $\frac{1}{2}$ the Value at $4d. \frac{1}{2}$ per Ell, in Shillings, Pence, and Farthings.

Answer, L. 4 13 4 $\frac{1}{2}$ Divide the Shillings by 20, and then 'twill be 4l. 13s. 4d. $\frac{1}{2}$.

In this Example I divide by 3 for the Groats, as being one Third of one Shilling, and it quotes 83s. then I consider that a Half-penny is the Eighth of $4d.$ therefore I take the eighth Part of the Groat-Line, or 83s. and that produces 10s. and $\frac{3}{8}$ of a Shilling, or $4d. \frac{1}{2}$; then the two Lines being added together, make 93s. $4d. \frac{1}{2}$; or 4l. 13s. 4d. $\frac{1}{2}$, as in the Work.

Example. 254 Yards of Cloib, at 10s. per Yard.

10s. is $\frac{1}{2}$ of 1l. 127 L. Answer:

Here the Half of 254 is taken, because 10s. is the Half of a Pound.

Example. 972 Gallons, at 6s. 8d. per Gallon.

6s. 8d. is $\frac{1}{3}$ of 1l. 324 L. Answer.

Here the third Part is taken, because 6s. 8d. is the Third of a Pound; and the Answer is 324 l.

And thus may any Question proposed be answered, belonging to the second Table, or Parts of a Pound; that is, by dividing the given Number by the Denominator of the Fraction, and the Quotient will be always Pounds; and if any Thing remains, it is always so many Halfs, Thirds, Fourths, Fifths, &c. of a Pound, according to the Denominator that you divide by.

If the Price be Shillings and Pence, or Shillings, Pence, and Farthings, and no even Part of a Pound; then multiply the given Number by the Shillings in the Price, and take

276 The YOUNG MAN's Companion.

take even Parts for the Pence, or Pence and Farthings, and add the several Lines together, and they will be Shillings; which Shillings bring into Pounds, as before.

Examples.

lb.	s.	d.	216 Ells, at 2s. 3d. $\frac{1}{2}$ per Ell.
426	at 4	9	2
4			
1704			3d. $\frac{1}{4}$ 432
6d. is $\frac{1}{2}$ of 1s. 213			$\frac{1}{2}$ d. $\frac{1}{6}$ 54
3d. is $\frac{1}{2}$ of 6d. 106 $\frac{1}{2}$ or 6d.			of 3d. 9
2 0)	202 3		2 0) 49 5
Answer, L. 101	3 6		L. 24 15 Answer.

396 Gallons of Brandy, at 7 s. 9 d. per Gallon.	
	7
	2772
6d. is $\frac{1}{2}$ of 1s.	198
3d. is $\frac{1}{2}$ of 6d.	99
2 0)	306 9
L. 153	9 Answer.

When the Price is 10d. only annex the 0 to the Right-hand of the given Number, (which is multiplying by 10) and they are Pence; which divide by 12 and by 20.

Example. 426 lb. of Hops, at 10 d. per lb.

12)	4260
2 0)	35 5
L. 17	15 Answer.

When the Price is 11d. set down the Quantity twice in the Form of Multiplication, and add the two Lines together; then divide by 12 and by 20.

Example.

Example. 426lb. of Copper, at 11d. per lb.

426

12) 4686 Pence.

20) 390—6

£. 19 10 6 Answer.

If the Price be 11d. $\frac{1}{2}$, first do as above, and then take Half of the uppermost Line, &c.

Example. 942lb. of Tobacco, at 11d. $\frac{1}{2}$ per lb.

942

471

12) 10833 Pence.

20) 902—9d.

£. 45 2 9 Answer.

When the Price is 1s. only divide by 20.

20) 964 Example. 964lb. of Tobacco, at 12d. per lb.

£. 48 4 Answer.

When the Price is 2s. it is done at Sight, by doubling the last Figure towards the Right-hand, and setting it apart for Shillings; and the Figures towards the Left are Pounds.

Example. 596 Gallons of Spirits, at 2s. per Gallon.

£. 59 12 Answer. Here the Double of 6 is 12s. and the 59 are Pounds.

From this Method of Working by 2s. a Multitude of Examples may be most expeditiously wrought, viz.

Yards 444 of Cambrick,

Ells,

at 5s. 9d.

426 at 3s. 6d.

44 8 at 2s.

per Yard.

44 8 at 2s.

42 12 at 2s.

1s. $\frac{1}{2}$ 2s.

22 4 at 1s.

1s. $\frac{1}{2}$ 2s.

21 6 at 1s.

6d. $\frac{1}{2}$ 1s.

11 2 at 6d.

6d. $\frac{1}{2}$ 1s.

10 13 at 6d.

3d. $\frac{1}{2}$ 6d.

5 11 at 3d.

Answer £.

74 11 at 3 6

Ans. £. 127 13 at 5 9

Altho'

278 The YOUNG MAN's Companion.

Altho' the Operation of the two last Examples is so intelligibly performed, that there is no Need of further Explanation; yet, to prevent all Mistakes, observe that,

444 Yards of Cambrick, at 5s. 9d. is done thus,

at 2s. L.	44	8	The 4 on the Right-hand is doubled
at 2s.	44	8	for Shillings, and the remaining 44 are
at 1s.	22	4	so many Pounds, so that 44l. 8s. is the
at 6d.	11	2	Amount at 2s. per Yard, which is set
at 3d.	5	11	down again for 2s. more, and conse-
			quently the Half, which is 22l. 4s. is
at 5 9 is	127	13	the Amount at 1s. per Yard, and the $\frac{1}{2}$
			of this 11l. 2s. is the Amount at 6d.
			per Yard, and the $\frac{1}{2}$ of this 5l. 11s. is the Amount at 3d.
			per Yard, all which being added together, make 127l. 13s.
			the Amount of the Whole at 5s. 9d. per Yard.

Note, When the Number of Shillings is large, 'twill be shorter to multiply the Amount of 2s. per Yard, per Ell, per Pound, &c. by the Number of 2s. as are in the given Price, and if the Number be odd, there will always be 1 left, for which you will take the $\frac{1}{2}$ of the 2s. Line, and add it to the Product, as in the following Example.

Example. 548 Yards of Broad-cloth, at 12s. 6d. per Yard.

L. 54 16 at 2s.
6 Times 2s. is 12s.

328 16 at 12s.	<i>Note</i> , That 13l. 14s. is
6d. is $\frac{1}{2}$ of 1s. 13 14 at 6d.	the 4th Part of 54l. 16s. the
	two Shillings Line.

L. 342 10 Answer.

Or multiply by 12s.	548 Yards.
and take Half of the	12 Shillings.
given Number for the	
6d. thus :	6576 the Shills. at 12d. per Yard.
	$\frac{1}{2}$) 274 at 6d. per Yard.

2|0) 685|0 the Shills. at 12s. 6d. p. Yd.

L. 342 10 Answer.

When

The YOUNG MAN's Companion. 279

When the Price is an even Number of Shillings, multiply the Number of Integers by Half the Price, and double the first Figure of the Product for Shillings, and carry as is usual in Multiplication; and the other Figures towards the Left will be Pounds.

Example. 296 Yards of Cloth, at 14s. per Yard.
7 the Half of 14s.

L. 207 4s. Answer. Here 7 Times 6 is 42; the double of 2s. is 4s. &c.

When the Price is an odd Number of Shillings, work for the even Number as above; and for the odd Shilling, take the $\frac{1}{20}$ of the given Number, and add them together.

Example. 496 Gallons of Citron-Water, at 17s. per Gal.
8 the Half of 16, the even Part.

306 16s. In this Example, I say 8 Times
24 16 6 is 48; the double of 8 is 16s.
and carry 4; then 8 Times 9 is 72,
Answer, L. 421 12 and 4 is 76, 6 and carry 7; and 8
Times 4 is 32, and 7 is 39; then
the Half of 4 is 2, &c.

Even Parts of a Pound.

	Yards	Nobles s. d. each.
10s. is $\frac{1}{2}$ l.	426 of Cloth, at 10s. per Yd.	429 at 6 8
	213 Answer.	6s. 8d. $\frac{1}{3}$ l. 143 Answer.
	lb.	lb.
5s. is $\frac{1}{4}$	598 of Cochineal at 5s. per lb.	4s. is $\frac{1}{5}$ 154 of Indico, at 4s. per lb.
	l. 149 $\frac{1}{2}$ or 10s. Anf.	l. 30 $\frac{2}{5}$ or 16s. Anf.

3s. 4d. is $\frac{1}{6}$ | 542 Zeland Dollars, at 3s. 4d.
90 $\frac{1}{3}$ or 6s. 8d. Answer l. 90-6-8 Sterling.

In all these Examples of *Practice*, I divide by the Denominator of the Fraction, and what remains is always of the same Name with the said Denominator, as Halves, Thirds, Fourths, Sixths, or Eighths of a Shilling, or of a Pound, &c.

If the Price be Half a Crown, divide by 8; if at 20d. or 1s. 8d. divide by 12, &c.

When the Price is Shillings and Pence, and no even Part of

280 *The YOUNG MAN's Companion.*

of a Pound, multiply the given Number by the Shillings, and take Parts of it for the Pence, as directed before.

Example. 246 Marks, at 13s. 4d.

4d. $\frac{1}{3}$ |
1s.

13
738
246
82

For the Groat, I say, the
3's in 24, 8 Times, and the
3's in 6, twice, &c.

2|0) 328|0s.

£. 164 Answer.

But this Example may be sooner done by multiplying the given Number by 2, and dividing that Product by 3, (because a Mark is two Thirds of a Pound) thus :

246
2

3) 492

£. 164 Answer and Proof.

I have not here Room to speak of the various and almost infinite Methods and Rules of *Practice*, (having several other Subjects and Things to treat on) but shall leave some general Rules, which, if heedfully noted, will be of great Use to Learners ; and are these, *viz.*

1. When the Price is Parts of a Farthing, or of a Penny, as $\frac{3}{4}$, $\frac{5}{8}$, $\frac{7}{8}$, &c. then multiply the Integers by the Numerator, and divide by the Denominator, and the Result will be either Farthings or Pence, &c. which reduce into Pounds, &c.

2. When the Price is Pence, and no even Part of a Shilling ; as suppose 5d. 7d. 8d. or 9d. then it may be done by taking their Parts, as 3d. and 2d. is 5d. and 4d. and 3d. is 7d. and 4d. and 4d. is 8d. and 6d. and 3d. is 9d. but it is an easy and sure Way, to multiply the given Number by 6, 7, 8, or 9, &c. and then the Product is Pence ; which bring into Pounds by *Reduction*.

3. When the Price is Pence, and Parts of a Penny ; as 1d. $\frac{1}{4}$, 2d. $\frac{1}{2}$, or 6d. $\frac{3}{4}$; then work for the Penny by taking the $\frac{1}{12}$; for 2d. the $\frac{1}{6}$; and for 6d. the $\frac{1}{2}$: Then for the Farthings, take $\frac{3}{4}$ of the Penny Line ; and for $\frac{1}{2}$, $\frac{3}{4}$ of the two

two Penny Line ; and for $\frac{1}{4}$, take $\frac{1}{8}$ of the 6 Penny Line ; and add their Results together, and the Total will be Shillings, which reduce to Pounds by dividing by 20. Or by the sure Way of bringing the mixed Numbers into the lowest Denomination ; as $1d. \frac{1}{4}$, into 5 qrs. $2d. \frac{1}{2}$, into 5 Halfpence, and $6d. \frac{3}{4}$, into 27 Farthings ; then multiply the Integer by 5, and the Product is Farthings ; or by 5 Half-pence, and the Product will be Half-pence ; or by 27 Farthings, and the Product will be Farthings ; which, whether Farthings or Pence, reduce to Pounds, &c.

4. When the Price is Shillings and Pence, or Shillings, Pence, and Farthings ; multiply the Integers by the Shillings of the Price, and take Parts for the Pence, or Pence and Farthings, &c.

5. If the Price be Pounds and Shillings, or Pounds, Shillings, Pence, and Farthings ; multiply by the Shillings in the Price, that is, in the Pounds and Shillings, and take Parts of the Pence and Farthings.

6. When the Number of Integers hath a Fraction annex'd, or belonging to them ; as $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, &c. then take $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{3}{4}$ of the Price of one of the Integers, and add that to the other Results.

7. That you may be sure your Work is right, 'twill be proper always to work your Question at least two different Ways, and if the Answers come out alike, then you may be sure your Work is true, otherwise 'tis false. As for Example,

827 Ells of fine Holland, at 8s. 9d. per Ell.

82 14 at 2s.

4 Times 2s. is 8s.

827 Ells.

8

330 16 Value, at 8s.

6616 at 8s. per Ell.

$6d. \frac{1}{4} 2s.$ | 20 13 6 at 6d.

$6d. \frac{1}{2} 1s.$ | 413 6d. at 6

$3d. \frac{1}{2} 6d.$ | 10 6 9 at 3d.

$3d. \frac{1}{2} 6d.$ | 206 9d. at 3

361 16 3 at 8s. 9d.

2|0723|6 3 at 8 9

361|61 3

TARE and TRET, &c.

Gross Weight, is the Weight both of the Goods in Hundreds, Quarters, and Pounds, and also of the Weight of the

282 *The YOUNG MAN'S Companion.*

the Hoghead, Cask, Chest, Bag, Bale, &c. in which the Goods are contained.

Tare is allowed to the Buyer for the Weight of the Hoghead, Cask, Chest, Bag, Bale, &c. that contains the Goods.

Trett is an Allowance made for Waste, Dust, &c. in sundry Sorts of Goods, as Tobaccos, Cottons, Peppers, Spices, &c. and is always 4lb. *per* 104lb. Suttle, and found by dividing the Suttle Pounds by 26, because 4 Times 26 makes 104lb. When the Gross Weight is brought into Pounds, and before the Tare is deducted, they are called *Pounds Gross*; and after the Tare is subtracted, the remaining Pounds are called *Pounds Suttle*; which divided by 26, (as said before) quotes Pounds Trett, &c. which being deducted out of the Suttle Pounds, leaves the Pounds Nett.

Tare at so much per Cask, Hoghead, Bag, &c.

The Allowances for Tare are variously wrought, as by the following Examples.

In 12 Casks of Indigo, containing 45 C. 1 qr. 14lb. Gross, Tare 30lb. per Cask, How many Pounds Nett?

12 Casks	C.	qr.	lb.
—	45	1	14
360 Pounds Tare	45		
—	45		
	4542		
	5082 Pounds Gross		
Subtract	360 Pounds Tare		
	—		
Answer	4722 Pounds Nett		

In this Example, the lbs. Tare of one is multiplied by the Number of Casks, and the Product is 360 Pounds Tare, and the Gross Weight is reduced into Pounds, by the Method shewn in *Reduction* of Weight; and then the Pounds Tare are deducted from the Pounds Gross, and the Remainder are Pounds Nett, *viz.* 4722, as in the Work.

When the Tare is at so much *per* Cwt. multiply the Number of Hundreds by the Tare, and take Parts for the odd Weight, and add it to the Tare found by Multiplication, and divide it by 112, to bring it into Gross Weight, in order for Subtraction.

Example.

Example. What is the Nett Weight of 12 Casks of Argol, Wt. Gross.

84 C. 2qrs. 14lb.

14 Tare per C.

336
84

7 for half C.

1 $\frac{3}{4}$ for 14lb.

C. q. lb.

84—2—14 Gross

10—2—8 $\frac{3}{4}$ Tare

74—0—5 $\frac{1}{4}$ Nett Wt.

112) 1184 $\frac{3}{4}$ (10 C.
112

64lb. or half a C. and 8lb. $\frac{3}{4}$

The Tare in the last Example is found to be, by the foregoing Directions, 10 Cwt. 2qrs. 8lb. $\frac{3}{4}$, which subtracted, as in the Work, leaves 74 Cwt. 0qrs. 5lb. $\frac{1}{4}$ for the Nett Weight.

But the foregoing Example may be sooner done by *Practice*, thus :

C. q. lb.

8) 84—2—14 Gross

sub. 10—2—8 $\frac{3}{4}$ Tare

74—0—5 $\frac{1}{4}$ Nett

In this Method, the Gross Weight is divided by 8, because 14lb. is one eighth Part of 112lb. and the Remainder is reduced into the next inferior Name, and still divided by 8 to the End, and then deducted as above; and the Nett Weight is the same as by the other Way. And so may any Tare per Cent. be found, if the Tare be an even Part of 112lb. as 14 is one Eighth, and 7lb. is the Half of that, and 16lb. is one Seventh, and 8lb. is the Half of that, &c. that is, if the Tare be at 7lb. per Cwt. find it for 14lb. as before, and then take the Half of that for 7lb. per Cwt. Tare, the like for 8lb. per Cwt. Tare; take one Seventh for 16lb. and then the Half of that for 8lb. per Cwt. Tare.

Of T R E T T.

What *Trett* is, when allowed, and how found, hath been said already; now I shall give an Example for Explanation, as follows.

Bought

284 *The YOUNG MAN'S Companion.*

Bought Six Hogsheads of Tobacco, containing Grofs and Tare, as follows, viz.

N ^o	2 qt. Grofs	C.	qrs.	lb.	lb.
1	4	1	20	Tare	80
2	5	2	19		100
3	6	3	18		102
4	7	3	12		104
5	8	2	13		106
6	9	1	14		110
26)	4198	(161 lb. Trett	42	3	12
	26		42		602
			42		
	159		42		
	156		42	96	
			4800	Pounds Grofs.	
	38	Subtract	602	Pounds Tare.	
	26				
			4198	Pounds Suttle.	
	12 or $\frac{6}{13}$	Deduct	161 $\frac{6}{13}$	Pounds Trett.	
			4036	$\frac{7}{13}$	

Note, The 12 that remains is $\frac{12}{26}$ Parts of a Pound, which being abbreviated, as directed in the Rules for Vulgar Fractions, make $\frac{6}{13}$.

There are some few other Rules, such as Barter, or exchanging Goods for Goods; also Exchanges of Coin, Profit, and Loss, &c. but all of them being done either by the Rule of Three, or by Rules of Practice, it is therefore here unnecessary to enlarge upon them.

RULES and DIRECTIONS for BOOK-KEEPING: Or, MERCHANTS-ACCOMPTS.

IT is not without good Reason that most People of Business and Ingenuity are desirous to be Masters of this Art, if we consider the Satisfaction that naturally arises from an Account well kept; the Pleasure that accrues to a Person by seeing what he gains by each Species of Goods he deals in, and his whole Profit by a Year's Trade; and thereby also to know the true State of his Affairs and Circumstances, so that he may, according to his Discretion, retrench or enlarge his Expences, &c. as he shall think fit.

of

Of the Books in Use.

THE Books of principal Use are, the *Waste-Book*, the *Journal*, and the *Leidger*.

WASTE-BOOK.

IN this Book must be daily written whatever occurs in the Way of Trade ; as Buying, Selling, Receiving, Delivering, Bargaining, Shipping, &c. without Omission of any one Thing either bought or sold, excepting where ready Money is concerned, whether it be for Goods sold or bought immediately, Money lent or received at Interest, &c. for that must of course be enter'd into the *Cash-Book*, from whence it is posted into the *Leidger*.

The *Waste-Book* is ruled with one marginal Line towards the Left-hand, and three Lines, for Pounds, Shillings, and Pence, towards the Right-hand ; and the Day of the Month, or Year of our Lord, is commonly wrote or inserted in the Middle of the Page. In this Book any one may write, and, on Occasion, any Thing may be altered or blotted out, if not well entered, or any Error be made.

JOURNAL.

INTO this Book every Thing is posted out of the *Waste-Book*, but in other Terms, in a better Stile, and in a fairer Hand, without any Alteration of Cyphers or Figures ; and every Parcel, one after another, (promiscuously set) without Intermission ; to make the Book, or several Entries of it, of more Credit and Validity, in Case of any Law, Dispute, or other Contröversy that may happen between Merchant and Merchant. In this Book you are to distinguish the Debtor and Creditor, (or, in quainter Terms, the Debt and Credit.) And to this Book you must have Recourse for the Particulars of an Account, which in the *Leidger* are entered in Gross, that is, in one Line. In this Book also, the Day of the Month must be placed in the Middle of the Page ; and is ruled with double marginal Lines, for References to the *Leidger*, on the Left-hand ; and with three Lines for Pounds, Shillings, and Pence, on the Right-hand ; as the *Waste-Book*.

Of the LEIDGER.

FROM the *Day-Book*, or *Journal*, (as derived from the *French*) all Matters or Things are posted into the *Leidger*, which by the *Spaniards* is called *El libr Grande*, as being the biggest or chief Book of Accounts. The Left-hand Side

Side of this Book is the *Debtor*, and the Right the *Creditor*, and the *Number* and *Folios* of each must be alike, as 45 *Debtor*, and also 45 *Creditor*. The Day of the Month (in this Book) by most is set in a narrow Column on the Left-hand, and the Month on the Left of that: But the Number in the narrow Column referred to the Journal Page, and the Month and Day may be placed in the broad Column to the Right of that; and at the Head of each Folio, the Name of the Place of Residence, and the Year of our Lord, as thus:

London, Anno _____ *1755.*

But the Examples of these several Books hereafter following, will make the foregoing Hints concerning them much more intelligible. — Throughout the whole Practice of Booking continually remember, that

All Things received, or the Receiver, are Debtors to the Things delivered, or the Deliverer.

Waste-Book Entry.

		London, January 1, 1755.	l.	s.	d.
		Bought of <i>William Wilkins</i> of <i>Nortonfalgate</i> , 120 Yards of white Sarcenet, at 2s. 3d. per Yard, to pay in 2 Months	13	10	00
1		<i>The Journal Entry of the same.</i>			
-		Wrought Silk Debtor to <i>William Wilkins</i> ,			
2		<i>l.</i> 13-10 for 120 Yards of white Sarcenet, at 2s. 3d. per Yard, to pay in 2 Months —	13	10	00

In this Example, the Account of wrought Silks is the Receiver, and therefore Debtor to *William Wilkins* the Deliverer.

Note, This is a general Method of entering all such Goods; but if you are desirous to know the Profit or Loss upon any particular Species of Goods, 'twould be best to say, White Sarcenet Debtor, &c.

Again, Waste-Book Entry. January 4.			
Sold <i>Henry Hartington</i> 246lb. Nett of Indigo Lahore, at 6s. 6d. per lb. to pay at 3 Months			
			79 19 00

Journal

The YOUNG MAN's Companion.

287

Journal Entry.

l. s. d.

3 Henry Hartington, Dtr. to Indigo Lahore for
4 246lb. Nett at 6s. 6d. per lb. to pay in 3
Months. ———

79 19 00

Once more.

Waste-Book Entry.

Bought of George Goodinch, sen. viz.

Cheshire Cheese 430 C. $\frac{1}{2}$ at 23s. } l. 502—5
4d. per C.

Butter, 50 Firkins qt. Nett } 35—0
2800lb. at 3d. per lb. to pay at }
6 Months. ———

537 05 00

Journal Entry.

5 Sundry Accounts Dtr. to George Goodinch,
l. 537—05—viz.

4 Cheese of Cheshire, for 430 C. $\frac{1}{2}$ } l. 502—5
at 23s. 4d. per C.

5 Butter, for 50 Firkins, qt. Nett } 35—0
2800lb. at 3d. per lb. to pay }
at 6 Months. ———

537 05 00

Waste-Book.

Sold James Jenkin——viz.

White Sarcenet 50 Yards, at } l. 7—10—0
3s. per Yard

Indigo Lahore, 50lb. at 7s. } 17—10—0
per lb.

25 00 00

Journal Entry of the last.

6 James Jenkins, Dtr. to sundry Accounts, viz

7 To wrought Silks, or to white
8 Sarcenet, for 30 Yards, at } l. 7—10—0
3s. per Yard, according as the
Acc. shall be titled.

To Indigo Lahore, for 50lb. } 17—10—0
at 7s. per lb.

25 00 00

From these few Examples of Entry, it may be observed, that an experienced Person in Accounts, and a good Writer, may keep a *Journal* without a *Waste-Book*, or a *Waste-Book* without a *Journal*, since they both import one and the same Thing, though they differ a little in Words, or Expression; for the Leaves of both are number'd by Pages or Parcels.

But

288 *The YOUNG MAN's Companion.*

But, however, I shall give Methods of keeping each, as far as Room will give Leave. But before any Thing is done, an Inventory or Particular of your whole Stock or Estate ought to be taken, as in the following Instance, where the first Part contains what you are supposed to be possessed of, or have owing, and the second Part what you owe to others.

(1)
Waste-Book.

London. January 1st, ——— 1755.

An Inventory of all my Effects in Money, Goods, and Debts, belonging to me A. B. of London, Merchant, —viz.

In Cash for Trading Occasions		<i>l.</i>	<i>s.</i>	<i>d.</i>
	<i>l.</i>	3500	00	0
In Tobacco 4726 lb. at 9d.	}	177	04	6
per lb.				
In Broadcloth 6 Pieces, at 50s. per Piece	}	15	00	0
Dowlas 1000 Ells, at 2s. 4d. per Ell		116	13	4
Canary Wines 9 Pipes, at 30 <i>l.</i> per Pipe	}	270	00	0
Due to me from Henry Bland, per Bond		60	00	0
12 March next Interest 5 per Cent.			4138	17 10

(1)
Journal.

Sundry Accounts Dr. to Stock 4138*l.* 17*s.* 10*d.*
—viz.

1	Cash for Trading Occasions	3500	00	0
	Tobacco 4726 lb. at 9d.	}	177	04 6
	per lb.			
1	Broadcloths 6 Pieces at 50s. per Piece	}	15	00 0
1	Dowlas 1000 Ells, at 2s. 4d. per Ell		116	13 4
1	Canary Wines 9 Pipes, at 30 <i>l.</i> per Pipe	}	270	00 0
3	Henry Bland due on Bond		60	00 0
	12 March next Interest 5 per Cent.		4138	17 10

I shall make one Page serve both for *Waste Book* and *Journal Entries*, as well to save Room, as to have both Methods of Entry under Eye, to make them more intelligible and useful to the Reader, he hereby being not obliged to turn over Leaf to see their Difference of Entry.

Waste Book.				l.	s.	d.		
1	London, January 1 st , ————— 1755.							
	Owing to William Webb, by	}	Note of Hand ———	50—00—00	128	12 04		
	Ditto to Roger Ruff, to balance his Accompt	}	————	16—12—04				
	Ditto to Henry Hern, due the 4th of May next	}	————	62—00—00				

<i>Journal.</i>				l.	s.	d.
Stock Debtor to sundry Accompts, 128 l.						
12 s. 4 d. — viz.						
3	To William Webb, by Note	}	_____	50—00—00	128	12 04
	of my Hand					
4	To Roger Ruff, for Balance	}	_____	16—12—04		
	of his Account					
5	To Henry Hern, due the 4th	}	_____	62—00—00		
	of May next					

So that my Nett Estate is but 4010 l. 4 s. 8 d. supposing my Bond due from *Henry Bland* to be as good as Money in Hand, because I must always look upon myself oblig'd to pay all my own Debts, altho' my Debtors do not pay me.

<i>Waste-Book.</i>			2
London, Feb. 2. —————			1755.
Sold Thomas Townshend, viz.			
246 lb. of Virginia Cut Tobacco at 14 d. per lb.	}	14—07—00	83 07 00
460 Ells of Dowlas, at 3 s.			
per Ell ————	}	69—00—00	
—————			

Feb. 2.						
Journal.						
Thomas Townshend Debtor to Sundries, viz.						
To Tobacco for 246lb. at	}	14—07—00				
14d. per lb. ————						
To Dowlas for 460 Ells at	}	69—00—00				
3s. per Ell ————						
O				83	07	00
				Waste		

O

Waste

		<i>Waste-Book.</i>		
		<i>Ditto 24th.</i>		
Bought of <i>Leonard Legg</i> , 4 Pipes of Canary,			l.	s. d.
at 28 <i>l.</i> per Pipe,			112	00 00
To pay in 6 Months.				
		<i>Ditto 24th.</i>		
		<i>Journal.</i>		
1	Canary Wines Debtor to <i>Leonard Legg</i> for			
—	4 Pipes, at 28 <i>l.</i> per Pipe		112	00 00
2	To pay in 6 Months.			

The short Lines ruled against the Journal Entries are, or may be termed Posting Lines, and the Figure on the Top of the Line denotes the Folio of the Leidger where the Debtor is enter'd ; and the Figure under the Line shews the Folio of the Leidger where the Creditor is entered ; and the other smaller Figures against the sundry Debtors, or sundry Creditors (whether Goods or Persons) shew also in what Folio's of the Leidger they are posted. And the Figures in the narrow Column towards the Left-hand of the Pounds, Shillings, and Pence Lines, direct to the Folio in the Leidger where the *Debit* or *Credit* is posted ; that is, to the Accompt of the Goods or of the Person, immediately following the Words *To* or *By* ; the first being proper to the Left or *Debit* Side in the Leidger ; and the other used always on the Right or *Credit* Side of the Folio's in the Leidger.

There are several other Books used by Merchants besides those three before-mentioned ; as the *Cash-Book*, which is ruled as the Leidger, and folio'd likewise ; wherein all Receipts of Money are entered on the Left-hand Folio, and Payments on the Right ; specifying in every Entry the Day of the Month, (the Year being set on the Top) for what and for whose Account the Money was received, or paid ; and the Total *Debit* and *Credit* of each Side, is to be posted into the Leidger, to the Accompt of Cash therein, in one Line of either Side, *viz.* To, or By sundry Accompts, as *per Cash-Book*, Folio, &c. which is to be done once a Month, or at Discretion ; and the Particulars of each Side, Article by Article, are to be posted into the Leidger to the proper Accompts unto which they belong ; with References in the *Cash-Book* to the several Folio's in the Leidger ; and

carry

carry the Balance over Leaf in the Cash-Book ; by which you may know at any Time what Cash you have, or ought to have by you.

Another Book, is a Book of Charges of Merchandizes, wherein are to be entered the Custom and petty Charges of any shipp'd Goods ; as Porterage, Wharfage, Warehouse-room, &c. and once a Month are transferred into the Cash-Book on the Credit Side, making Reference to the Book of Charges of Merchandize ; and likewise the same in the Debtor Side of the same Accompt in the Leidger for the Particulars thereof.

The next Book I shall name, is the Invoice Book, or Book of Factories : In this Book are to be copied all Invoices, or Cargozones of Goods shipp'd, either for Accompts proper or in Company ; and also of Goods receiv'd from abroad, which must always be entered on the Left-side, leaving the Right-side blank ; and on the Advice of the Disposal of Goods sent abroad, and also on the Sale of Goods received from abroad, enter them on the Blank or Right-side ; so that at first View may be seen how the Accompt stands, &c.

The next is a Bill Book, wherein are entered Bills of Exchange accepted, and when they become due ; and when paid, made so in the Margin.

The next is a Book of Household Expences, for the Monthly Charge spent in House keeping ; likewise Apparel, House-Rent, Servants Wages, and Pocket Expences ; and this may be Monthly summ'd up, and carried to the Credit of Cash.

Besides the above mentioned, there must be a Book to copy all Letters sent abroad, or beyond the Seas ; wherein the Name of the Person or Persons to whom the Letter is sent, must be written pretty full, for the readier finding the same.

The next is (and what is very necessary) a Receipt-Book, wherein are given Receipts for Money paid, and expressed for whose Account or Use, and for what is received ; to which the Receiving Person must set his Name, if he acts only for himself, but if he acts for another, he must nominate him, and specify himself to be his Agent, with the Year and Day of the Month when the Money was paid.

Lastly, A Note or Memorandum Book, to minute down

Affairs that occur, for the better Help of Memory ; which is of great Use, where there is Multiplicity of Business.

Having given an Account of the several Books and their Use, the next Thing necessary will be to give some few Rules of Aid, to enable the Book-keeper to make proper Entries, and to distinguish the several Debtors and Creditors, *viz.*

First, For Money received, make Cash Dtr. to the Party that paid it, [if for his own Account] and the Party Cr. *N. B.* If *A. B.* pays Money for *C. D.* you must make *C. D.* Creditor for the Sum receiv'd by the Hands of *A. B.* &c.

Secondly, Money paid, make the Receiver Dtr. [if for his own Account] and Cash Cr. Here the Principal must be understood to be the Receiver, altho' his Servant transacts the Business : So if *A. B.* receive for *C. D.* — *C. D.* must be Dtr.

Thirdly, Goods bought for ready Money, make the Goods Dtr. to Cash, and Cr. by the Goods.

Fourthly, Goods sold for ready Money, just the contrary, *i. e.* Cash Dtr. and the Goods Cr.

Fifthly, Goods bought at Time ; Goods bought are Dtr. to the Seller, and the Seller Cr. by the Goods.

Sixthly, Goods sold at Time, just the contrary, *i. e.* the Party that bought them is Dtr. to the Goods, and the Goods Cr. by the Party who is the real Buyer.

Seventhly, Goods bought, Part for ready Money, and the rest at Time : First, make the Goods Dtr. to the Party for the Whole. Secondly, make the Party Dtr. to Cash for the Money paid him in Part of these Goods.

Eighthly, Goods sold, Part for ready Money, and the rest at Time : First, make the Party Dtr. to the Goods for the Whole. Secondly, Cash Dtr. to the Party for so much as you receive of him in Part of those Goods. — Or you may *Debet* the Goods bought or sold to Sundries, *viz.* Goods bought, Dtr. to the Selling Man for so much as is left unpaid, and to Cash for so much paid in ready Money : And so the Contrary for Goods sold.

Ninthly, When you pay Money before it is due, and are to have Discount allowed you, make the Person Dtr. to Cash for so much as you pay him, and to Profit and Loss for the Discount ; or make the receiving Man Dtr. to Sundries, as before.

Profit

Profit and Loss.

To Cash for what Money you pay, and have nothing for it; as Discount of Money paid you before due, and to Abatement by Composition, Household Expences, &c.

Per Contra Cr.

By Cash for all you receive, and deliver nothing for it; as Discount for prompt Payment, any Legacy left you, Money received with an Apprentice, and by the Profit of every particular Commodity you deal in, by Ships in Company, by Voyages, &c.

To balance or clear an Accompt when full written.

1. IF the Dtr. Side be more than the Credit, make the old Accompt Cr. by the new; and, if the contrary, make the new Accompt. Dtr. to the old: But if the Dtr. Side be less than the Credit, then make the old Accompt Dtr. to the new, and the new Accompt Cr. by the old, for such a Rest or Sum, as you shall find in the Accompt.

2. An Accompt of Company, wherein you have placed more received of another than his Stock; then add as much on the *Debet* Side as you find on the *Credit* Side; to the End that, in the new Accompt, you may have so much *Debet* as you put in, and so much *Credit* as you have received.

3. In Accompts of Merchandize, you must enter the Gain, or Loss, before you make the old Accompt Cr. by the new, and the new Dtr. to the old, for the Remainder of Goods unfold.

4. In the Foreign Accompts, which you are to keep with a double Margin or Column, for Dollars, Crowns, or any Foreign Coins whatsoever, which have been received or paid by Bills of Exchange, for Goods sold by Factors or Correspondents, or bought by them for the Accompt before; here you must first balance the said inward Margin of Dollars, Crowns, &c.

To remove an Accompt full written to another Folio.

Sum or add up the Dtr. and Cr. Sides, and set the Difference; which place to its Opposite: As, admit the Cr. Side exceeds the Dtr. then you are to write the Line in the old Accompt to balance on the Dtr. Side, to answer the Line on the Cr. Side of the new Accompt.

How to balance at the Year's End, and thereby to know the State of your Affairs and Circumstances.

YOU must make an Accompt of Balance on the next void Leaf or Folio of your Leidger to your other Accompts; but after you have so done, do not venture to draw out the Accompt of Balance in the said Folio, till you have made it exact on a Sheet of Paper, ruled and titled for that Purpose; because of Mistakes or Errors that may occur or happen in the Course of balancing your Leidger; which are to be rectified, and will cause Erasements or Alterations in that Accompt, which ought to be very fair and exact; and after you have made it right in the said Sheet, copy fair the said Accompt of Balance into the Leidger.

The Rules for Balancing are these, *viz.*

1st, Even your Accompt of Cash, and bear the Nett Rest to balance Dtr.

2^{dly}, Cast up all your Goods bought, and those sold, of what Kind soever, in each Accompt of Goods; and see whether all Goods bought, be sold, or not; and if any remain unsold, value them as they cost you, or according to the present Market Price for ready Money, and bear the Nett Rest to balance Dtr.

3^{dly}, See what your Goods or Wares severally cost, and also how much they were sold for, and bear the Nett Gain or Loss, to the Accompt of Profit and Loss.

4^{thly}, Even all your Dtrs. and all your Crs. in order as they lie, and bear the Nett Rest of every several Dtr. and Cr. to balance.

5^{thly}, Even your Voyages, your Factors Accompts, and Charges of Merchandize, or any other Accompts, wherein is either Gain or Loss, and bear the Nett Gain or Loss to the Accompt of Profit and Loss; and the Goods unsold to Balance.

6^{thly}, Even the Accompt of Profit and Loss, and bear the Nett Rest to Stock or Capital, as an Advance or Diminution to your Stock or Capital.

7^{thly}, Even your Stock, and bear the Nett Rest to balance Cr.

Then cast up the Dtr. and Cr. Sides of your Balance; and if they come out both alike, then are your Accompts well kept; otherwise you must find out your Error by pricking over

over your Books again, to see whether you have entered every Dtr. and Cr. in the Leidger, as you ought.

Note, By pricking over the Books is meant an Examining every Article of the Journal against the Leidger, and marking it thus, — or thus †; and upon a second Examination thus ‡; and upon a third Examination thus †— or any other Marks.

Note also, In all Accompts of Goods, you must keep a Column in the Middle of the Leaf, of each Side, for Number, Weight, or Measure.

And also note, That the Money, Wares, or Goods remaining in your Hands, and the Debts owing to you, must ever balance with the Nett Stock and Debts owing by you.

Tho' what hath been said in relation to Book-keeping, and the several Rules thereunto belonging, may seem a little abstruse to the altogether unlearned therein; yet there is no such mighty Difficulty to obstruct them as they may imagine: For these following Hints may render what hath been already said, intelligible to any ordinary Capacity.

1st, Stick close to the Text, or general Rule before mentioned, viz. That all Things received, or the Receiver, are Debtor to all Things delivered, or the Deliverer; for this Rule holds good in all Cases.

2^{dly}, When the Dtr. (whether Person or Goods) is known, the Cr. is easily understood, without mentioning it: For if *A* be Dtr. to *B*, then *B* is Cr. by *A*, for what Sum soever it be: Also, if Goods be Dtr. to *C*, then *C* is Cr. by those Goods, for the Sum they amount to. — This I mention, because that most Authors, (if not all) that I have met with on the Subject of Book-keeping, spend a great many Words which I think might be saved, in declaring the Cr. as well as shewing the Dtr. when it may be understood, as afore-said.

3^{dly}, This Art of *Italian* Book-keeping, is called *Book-keeping by double Entry*, because there must be two Entries; the first being a charging of a Person, Money, or Goods; and the second, a discharging of a Person, Money, or Goods.

4^{thly}, Strictly Note, That if the first Entry be on the Dtr. or Left-hand Side of your Leidger, the next, or second Entry, must always be made on the Right-hand or Credit Side of your Leidger: For whenever one Person or Thing is charged, then always another Person or Thing is discharged for the same Sum, let it be what it will.

And so it is in Balancing or Evening an Accompt, and carrying it to another Folio : For, if the old Accompt be evened by Balance on the Credit Side, then the new Accompt must be debited or charged on the *Debit* Side, for the Sum that balanced the old Accompt.

Much more might be said to this *Art of Book-keeping*, if I had Room ; but I have plainly spoke to the principal Fundamentals thereof, which, I hope, may be sufficient for the Instruction and Improvement of any intelligent Reader.

Further of Measuring. To find the Square Root of any Number.

THE Square Root is found by extending the Compasses on *Gunter's Line*, from 1 upon the Line to the Number given ; the Midway of the Extent is the Root, or Number desired, as 12 is the Root of 144, because 12 Times 12 is 144.

Suppose a Captain hath 5476 Soldiers, How many must be set in the Front, and how many in the Flank, to make them a Square ?

Extend the Compasses from 1 upon the Line to 5476, downwards, the Midway of that Extent is 74 Soldiers, both for Front and Flank.

 The Square Root of 144 being 12, then the 12 is the Cubick Root of 1728.

Thus proved :

Extend from 1728 upon the Line to 1, two Thirds of that Extent will reach from 1728 downwards to 12 the Cubick Root.

Or, Extend from 1 upwards, that Extent thrice the same Way from 12 will reach to 1728, the Cube Number.

To know whether Water will come from a Spring or Pond to your Dwelling, by a Leaden Pipe laid in the Earth.

Set a Pole upright in the Pond, and mark how many Feet and Inches of it are above Water ; then place another Pole in the Place, of equal Length with the other, where you would have the Water to come ; then place the Edge of the Quadrant A, B, the Center A, on the Top of the Pole, the Plummets hanging at Liberty, and spy thro' the Sights and Top of the Pole that is in the Water, and if the Thread

cutteth

cutteth any Degrees of the Quadrant, the Water may be convey'd, &c.

Of Measuring Land.

12 Inches is a Foot, 16 Foot and Half a Pole ; 40 Poles make a Furlong ; 8 Furlongs a Mile in Length.

160 Square Poles is an Acre of Land. In a square Acre are Roods 4, square Chains 10, square Poles or Perches 160, (as above) square Yards 4840, square Feet 43560, square Links 100000, square Inches 6272640. In a Mile in Length are Furlongs 8, Chains 80, Perches 320, Paces 1056, Yards 1760, Feet 5280, Links 8020, Inches 63360, Barley Corns 190080.

In a square Mile are Acres 640, Chains 6400, Perches 102400, square Links 64000000, square Inches 4014489600.

An *Italian* Mile is 1000 Paces, (of 5 Feet to the Pace) less than an *English* Mile by 280 Feet ; so that a League at Sea wants about one Furlong and $\frac{1}{4}$ of three *English* Miles.

A Table, shewing how to lay out an Acre of Ground by a Pole of Ash, in a Pasture.

Breadth in Poles.	Length of the Acre.		Breadth in Poles.	Length of the Acre.	
	Pol.	Feet.		Pol.	Feet.
1	160	0	14	11	7 $\frac{1}{4}$
2	80	0	15	10	11
3	53	5 $\frac{1}{2}$	16	10	0
4	40	0	17	9	7 $\frac{27}{34}$
5	32	0	18	8	14 $\frac{23}{34}$
6	26	11	19	8	6 $\frac{18}{19}$
7	22	14 $\frac{1}{7}$	20	8	0
8	20	0	21	7	10 $\frac{3}{4}$
9	17	12 $\frac{5}{6}$	22	7	4 $\frac{12}{23}$
10	16	0	23	6	15 $\frac{18}{23}$
11	14	9	24	6	11
12	13	5 $\frac{1}{2}$	25	6	6 $\frac{3}{5}$
13	12	5 $\frac{1}{4}$	26	6	2

Breadth in Poles.	Length of the Acre.		Breadth in Poles.	Length of the Acres.	
	Pol.	Feet.		Pol.	Feet.
27	5	15 $\frac{5}{18}$	54	2	15 $\frac{8}{9}$
28	5	11 $\frac{11}{14}$	55	2	15
29	5	8 $\frac{31}{38}$	56	2	14 $\frac{1}{7}$
30	5	5 $\frac{1}{2}$	57	2	13 $\frac{18}{57}$
31	5	2 $\frac{1}{62}$	58	2	12 $\frac{15}{29}$
32	5	0	59	2	11 $\frac{44}{53}$
33	4	14 $\frac{11}{17}$	60	2	11
34	4	11 $\frac{3}{7}$	61	2	10 $\frac{17}{61}$
35	4	9 $\frac{3}{7}$	62	2	9 $\frac{18}{31}$
36	4	7 $\frac{1}{3}$	63	2	8 $\frac{57}{63}$
37	4	5 $\frac{13}{37}$	64	2	8 $\frac{1}{4}$
38	4	3 $\frac{9}{19}$	65	2	7 $\frac{8}{15}$
39	4	1 $\frac{9}{13}$	66	2	7
40	4	0	67	2	6 $\frac{27}{67}$
41	3	14 $\frac{73}{82}$	68	2	5 $\frac{11}{17}$
42	3	13 $\frac{5}{14}$	69	2	5 $\frac{6}{23}$
43	3	11 $\frac{78}{86}$	70	2	4 $\frac{5}{7}$
44	3	10 $\frac{1}{2}$	71	2	4 $\frac{4}{71}$
45	3	9 $\frac{1}{6}$	72	2	3 $\frac{2}{3}$
46	3	7 $\frac{46}{54}$	73	2	3 $\frac{12}{73}$
47	3	6 $\frac{9}{4}$	74	2	2 $\frac{3}{7}$
48	3	5 $\frac{1}{2}$	75	2	2 $\frac{1}{5}$
49	3	4 $\frac{37}{98}$	76	2	1 $\frac{3}{33}$
50	3	3 $\frac{3}{10}$	77	2	1 $\frac{2}{77}$
51	3	2 $\frac{7}{34}$	78	2	0 $\frac{11}{13}$
52	3	1 $\frac{7}{26}$	79	2	0 $\frac{3}{79}$
53	3	0 $\frac{33}{106}$	80	2	0

The Use of the foregoing Table.

Suppose the Length, or Side of a Close, or Furlong, be 43 Poles, how much in Breadth will make an Acre?

Look 43 in the first Column, and right against it is 3 Poles, 11 Feet, and $\frac{27}{86}$ Parts of a Foot, which is about 10 Inches and 3 Quarters in Breadth to make an Acre; twice which is two Acres, &c.

I will give you an Example whereby you may prove all, or any Part of this Table.

The Side being 43 Poles, according to the Example above, I divide 160, the Poles in one Acre, by 43, and the Quotient gives 3 Poles, $\frac{31}{43}$ Parts of a Pole.

$$\begin{array}{r} 43) 160 \text{ (3 Poles.} \\ 129 \end{array}$$

31

$$\begin{array}{r} 31 \\ 16\frac{1}{2} \end{array}$$

186

31

$15\frac{1}{2}$ Half of 31.

$511\frac{1}{2}$ Product.

Secondly, I multiply the 31 Parts by $16\frac{1}{2}$, the Feet in a Pole in Length, and the Product is $511\frac{1}{2}$.

Thirdly, I divide the $511\frac{1}{2}$ by 43 also, and the Quotient gives 11 Feet, and $38\frac{1}{2}$ Remainder.

$$\begin{array}{r} 43) 511\frac{1}{2} \text{ (11 Feet.} \\ 43 \end{array}$$

81

43

38

38

12

76

386

462 Inches.

Fourthly, I multiply the Remainder $38\frac{1}{2}$ by 12, (the Inches in a Foot in Length) adding to the Product the Half of the 12 the Multiplier, and the Product is 462 Inches.

Lastly, I divide the 462 by 43, also, and the Quotient gives 10 Inches, and 32 remaining being gathered into one Sum, the Breadth is 3 Poles, 11 Feet, 10 Inches, $\frac{32}{43}$, which is almost 3 Quarters of an Inch.

$$\begin{array}{r} 43) 462 \text{ (10 Inches.} \\ 43 \end{array}$$

32

By this Method you may try any other Number in the Table.

A Table to lay out a square Acre of Land by Gunter's Chain.

Length Ch. Li.		Breadth Ch. Li.	
0	25	4	00
0	35	28	57 $\frac{1}{2}$
0	45	22	22 $\frac{2}{9}$
0	55	18	18 $\frac{2}{11}$
0	65	15	38 $\frac{1}{13}$
0	75	13	33 $\frac{1}{13}$
0	85	11	75 $\frac{8}{17}$
0	95	10	52 $\frac{12}{19}$
1	00	10	00
1	10	9	9 $\frac{1}{11}$
1	20	8	33 $\frac{1}{3}$
1	30	7	69 $\frac{3}{13}$
1	40	7	14 $\frac{2}{7}$
1	50	6	66 $\frac{2}{3}$
1	60	6	25
1	70	5	88 $\frac{4}{7}$
1	80	5	55 $\frac{5}{9}$
1	90	5	26 $\frac{6}{19}$
2	00	5	00
2	10	4	76 $\frac{4}{20}$
2	20	4	54 $\frac{11}{18}$
2	30	4	34 $\frac{2}{3}$
2	40	4	16 $\frac{2}{2}$
2	50	4	00
2	60	3	84 $\frac{8}{13}$
2	70	3	70 $\frac{10}{27}$
2	80	3	57 $\frac{7}{24}$
2	90	3	44 $\frac{1}{3}$
3	00	3	33 $\frac{1}{3}$
3	10	3	22 $\frac{18}{31}$
3	20	3	12 $\frac{1}{2}$
3	30	3	3 $\frac{1}{33}$
3	40	2	94 $\frac{2}{17}$

NOW to prove whether or no this Table be mis-printed.

Suppose the Length of a Piece of Ground at the Side be 3 Chains, 20 Links, how much in Breadth thereof will make an Acre?

Look for 3 Chains 20 Links in the first Column, and against it in the second Column is 3 Chains 12 Links and $\frac{1}{2}$ for the Breadth.

Or, always divide 100000, the Links in a Square Acre, by the Length, which in this Example is 3 Chains 20 Links, done as follows without the Table.

(1
12
148 $\times$ 6 (Ch. Li.
100000 (0 3 12 Breadth for the
3222 [Acre.
33

The Breadth is 3 Chains, 12 Links, and the Fraction $\frac{160}{320}$ is half a Link, because 160 the Remainder is half 320 the Divisor.

How to measure Land by Gunter's Chain.

Note, That this Chain is 4 Poles in Length, or 22 Yards, which is 66 Foot, or 792 Inches; it is divided into 100 Links, at every 10 Links

Links is a Brass Ring, for the more ready counting it in Measuring, so that it is no Matter which End goes foremost; and he that draws it should carry in his Hand 10 small Sticks, to stick in the Earth at every Chain's Length, and he that follows the Chain to gather up the Sticks.

Example. Suppose the Length of a Piece of Ground be 9 Chains, 50 Links, the Breadth 6 Chains, 25 Links, how many Acres, Rods, and Poles?

Multiply the Length by the Breadth as whole Numbers, and from the Product 593750 I cut off 5 Figures next the Right-hand, and the Remainder on the Left-hand are Acres; as you may see in the Margin.

The Reason of cutting off 5 Figures towards the Right-hand is, because 100,000 Links make a square Acre; so there being 5 Cyphers towards the Right-hand, all the Figures over 5 towards the Left-hand are Acres.

2dly, The remaining Figures 93750 so cut off from the 5 Acres, I multiply by 4, the Rods in an Acre, from which Product I also cut off 5 Figures or Places, and the Remainder is 3 Rods.

Lastly, I multiply 75000, so cut off, by 40, the Poles in a Rod, and cut off 5 Places as the other, and those to the Left-hand are 15 Poles.

	Ch.	Li.
Length	9	50
Breadth	6	25
	47	50
	19	00
	57	00
Acres	51	93750
		4
Rods	31	75000
		40
Poles	15	100000

To reduce Chains and Links into Feet.

Multiply the Number of Chains and Links together, as whole Numbers, by 66, the Feet in a Chain, which is 4 Poles in Length, and from the Product cut off the two last Figures towards the Right-hand, and the other Figures are Feet; and the two Figures so cut off to the Right-hand, are the hundredth Parts of a Foot; but if the Number of Links before you begin to multiply be under 10, then add a Cypher to it on the Left-hand; as suppose it were 90 Chains, 5 Links, set it down thus: 90 05; observe the same in all Lengths.

Point G, then draw the Line CG and FG. So is the Triangle CFG described on Paper.

Next, I fix myself in the Point F, and measure to the Point D, and find it 49 Poles, 09 Parts. To express this upon the Paper, I measure 49 09 upon the Scale, as before, with that Extent I set one Foot of the Compasses in F, and with the other I sweep the Arch VT; then I measure with the Chain from C to D, and find it 37 Poles, 8 Parts, which I take from the same Scale of equal Parts, and with that Extent set one Foot in C, and with the other sweep the Arch SD, then draw the Line CD; from C measure to E, which is supposed or found to be 47 Poles, 70 Parts, which take from the same Scale, as before, setting one Foot in D, with the other sweep the Arch EY, then measure from F to E, which is 17 Poles, 47 Parts, that taken from the same Scale as all the others, with that Extent, set one Foot in F, and sweep the Arch 2, 3, which cuts the former in E; then draw the Lines DE and EF, and the Whole is compleated. And the Field will be truly expressed or presented on the Paper, if you have perform'd the Work exactly.

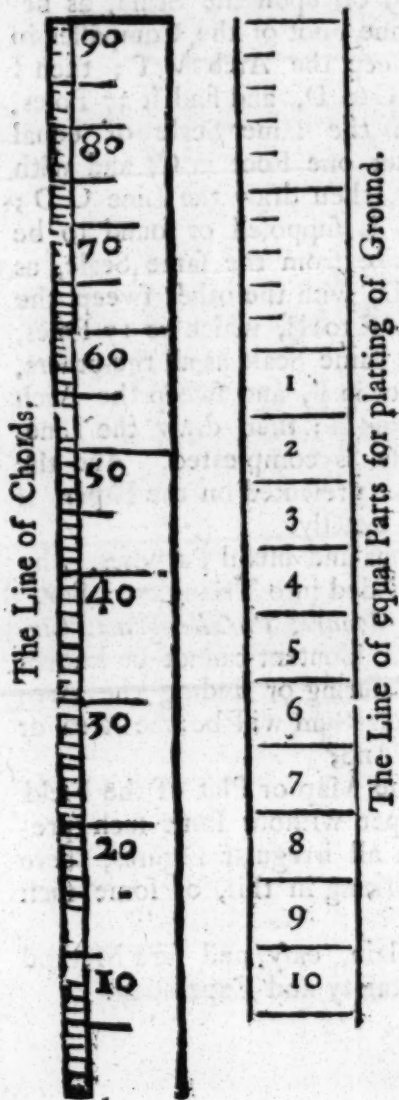
There are many good Reasons and useful Purposes, why the Field or Close should be divided into Triangles. For,

First, Unless it be a *perfect Square, Parallelogram, Circle or Ellipsis*, the Measure or Content cannot be known without it; and then by measuring or finding the Area of the particular Triangles, their Sum will be the Area or Measure of the whole Field. And,

2dly, The Construction of the Map or Plat of the Field cannot be laid down upon Paper without some such previous Preparation. So that in all irregular Figures, there is an absolute Necessity of working in this, or some such like Manner.

3dly, It is the most simple, plain, easy, and sure Method that can be used, both for Certainty and Expedition.

To lay down upon Paper an Angle containing any Number of Degrees and Minutes, by the Line of Chords.



The Line of equal Parts is of great Use in taking the Plat of a Close on Paper.

The Line of Chords is of Use for to take the Height of a Stile in making of Sun-Dials, &c.

By



By this Rule you may finish your Flat, observing, that it must all be divided into Triangles, remembering, that for every Chain or Pole you must take off the Scale one of the great Divisions, as from 4 to 5 is one Division; and for every 12 Links, or one 10th Part of your Pole, take one of the small Divisions; or with the Compass you may make a Line of equal Parts, according to the Bigness you desire your Plat; or having drawn a Plat, may by this Rule make it bigger or lesser.

But for the exact raising a Perpendicular Line of a Triangle, it is needful, you have a Cross-staff, viz. a Walking stick, with a round Ball fix'd on the Head of it, flat on the Top, on which cut a Notch like a Diameter of a Circle, and cross that

Notch with another at right Angles.

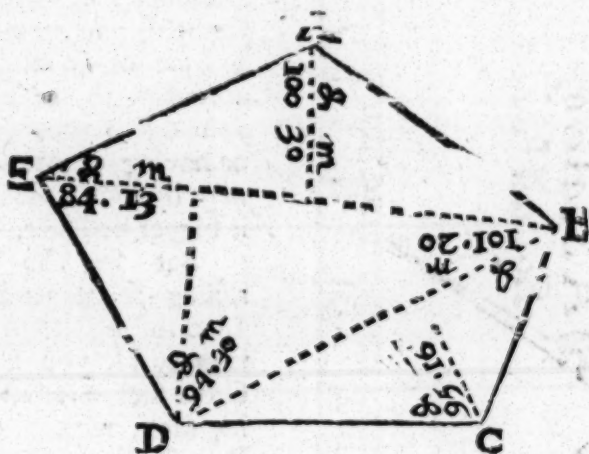
This you may stick in the Ground, when you are about measuring the Base of the Triangle, about the Middle thereof, just against the opposite Corner of the said Triangle, or Close of Ground, that one of the Notches may be a Parallel to the Place you are measuring the Base of; but if you find that the Staff, or the other Notch does not point exactly to the opposite Corner, remove as you see needful: This is so easy, I need say no more of it; for when you use it, you'll soon see the Benefit of it.

How

How to measure a Wood by the Help of a Quadrant, by measuring only round the same.

FIRST, Set up Marks at each Corner of the Wood, that three Marks may be seen at once; then at one of these Corners place a Stool, and lay the Quadrant flat thereon, and take Sight to two of the Marks on each Side, and mark upon Paper the Degrees of the Angle, and measure to the said two Marks in Sight, and lay them on the same Paper by a Line of equal Parts; do so at all the other Corners, till you have closed up the Plat or Wood, the which you may with Ease measure into Acres by the same Line of equal Parts upon your Paper.

Example.



Note, That if your Quadrant be too little, join two Quadrants together, or do it by a Board, &c. but a plain Table is much better.

Of GAUGING Vessels.

THE Art of Gauging is little different from the measuring of Timber, (before directed) as a Foot of Timber is 1728 cubical Inches, for in like Manner, as often as 1728 solid Inches are found in a Piece of Timber, be it round or square, so many Foot of Timber are contained in the Piece.

So in the Art of Gauging the Gallon of Ale and Beer is agreed on, to be 282 cubical Inches, and the Wine Gallon 231, and the Gallon of Dry Measure 272.

Therefore,

Therefore, so often as 282 solid Inches are contained in any Vessel, round or square, so many Gallons of Ale or Beer the said Vessel will hold. The same is to be observed in Wine and dry Measure, &c.

Note, That every cubical Foot contains 6 Gallons, and a small Matter more than a Pint, of Ale or Beer.

Of Wine, 7 Gallons, and almost 2 Quarts.

A cubical Foot of Dry Measure contains 6 Gallons, and about the third Part of a Gallon.

For 141 Inches are in 2 Quarts of Ale or Beer, $70\frac{1}{2}$ a Quart, $35\frac{1}{4}$ Inches in a Pint.

Though you may gauge Vessels by the Rule in Timber-Measure, yet here follow a few Examples in as easy a Manner as possible.

Example. Suppose there is a Vessel to be measured, in Length 105 Inches, in Breadth 76 Inches, Depth 46 Inches; how many square Inches are therein, as also how many Gallons or Barrels?

Multiply the Dimensions one into another, as is shewed in square Timber-Measure, and the last Product gives 367080 Inches in the Vessel; which divide by 282, or multiply by this Number 35461, as in this Example.

Cube Inches in the Tun 367080

The fix'd Number given 35461

$$\begin{array}{r}
 367080 \\
 2202480 \\
 1408320 \\
 1835400 \\
 1101240 \\
 \hline
 \end{array}$$

Gallons 1301|7023880

And from the Product always cut off 7 Figures or Places to the Right-hand, (which are Parts of a Gallon) and those on the Left-hand are Gallons, as in this Example are 1301 Gallons.

Note, That the Parts of a Gallon are not considerable, if there happen to be a Cypher next the Gallons: But in that above is the Figure 7, which is the 7 tenth Parts of a Gallon; that is, if a Gallon was divided into 10 Parts, that is 7 Parts thereof; or if the Figure 5 had been in the Place of 7, it had been half a Gallon, because 5 is the

the half of 10; or if the 70 next the Gallons had been 75, it had been three Quarters of a Gallon, because 75 is three Quarters of a Hundred, &c.

Lastly, Divide 1301 Gallons, so cut off, by 36, (the Gallon in a Barrel of Beer, or by 32, in a Barrel of Ale) and the Quotient gives 36 Barrels of Beer, and 5 Gallons remaining, and near three Quarters of a Gallon.

Example. How to gauge a round Tun, Tub, or Furnace.

First, If your Tun, or the like, be of one Bigness or Breadth, both at Top and Bottom, find the Cube Inches therein contained, as is shewed in round Timber Measure, and reduce it into Gallons, as before.

But if it be narrower at the Top than at the Bottom, or contrary, take the Breadth or Diameter of the Tun, a little above the Middle of it, that is, next the widest End, if it be taper.

Or find the mean Diameter thus :

The Diameter at the Bung or Top of the Tun	} 26	The two Thirds of the Difference are 2 Inches, which added to 23, the lesser Diameter, makes 25, the mean Diameter.	
The Diameter at the Head or Bottom of the Tun			} 23
3 Inches Difference			

Example. Suppose the mean Diameter of a Tun, Tub, Furnace, or half a swelling Cask, or the Line to be 81 Inches, and the Length 48, how many Gallons are therein?

The Cube Inches contained therein, you may find by the Rule of round Timber-Measure, as thus :

The mean Diameter is 81	} Inches
Length of the Vessel is 48	

Multiply 81 by 81, and that Product by 11, (always) and the last Product divide by 14, (always) the Quotient gives the Content at 1 Inch deep of the Liquor, (if any.)

2dly, Multiply the said Quotient by 48, the Length of the Vessel, and the Product gives the solid Inches in the same, which reduce into Gallons, and the Gallons into Barrels, gives 24 Barrels, and about 13 Gallons and a half.

Example. Suppose the mean Diameter of a Cask is 14 Inches, and the Length 72 Inches, how many Gallons are therein?

Extend

Th
Extend
Gunter's I
to 14 the
cent twice
72 the I
to somew
lons of A
But if
end from
to 14 t
Extent,
will reac

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

Extend the Compasses on Gunter's Line from 18, 95, to 14 the Diameter, that Extent twice downwards, from 72 the Length, will reach to somewhat above 39 Gallons of Ale.



Length 72

But if a Wine Vessel, extend from 17, 15, (always) to 14 the Diameter, that Extent, twice downward from 72, the Length in Inches, will reach to 48 Gallons.

1	17	26	2066	51	5127	76	8155
2	48	27	2178	52	5255	77	8263
3	87	28	2293	53	5382	78	8369
4	134	29	2307	54	5509	79	8473
5	187	30	2523	55	5636	80	8576
6	245	31	2640	56	5762	81	8677
7	308	32	2739	57	5888	82	8766
8	375	33	2878	58	6014	83	8873
9	446	34	2998	59	6140	84	8967
10	520	35	3113	60	6265	85	9059
11	598	36	3241	61	6389	86	9149
12	680	37	3364	62	6513	87	9236
13	764	38	3487	63	6636	88	9320
14	851	39	3611	64	6759	89	9402
15	941	40	3735	65	6881	90	9480
16	1033	41	3860	66	7002	91	9554
17	1127	42	3986	67	7122	92	9625
18	1224	43	4112	68	7241	93	9692
19	1323	44	4238	69	7360	94	9755
20	1424	45	4364	70	7477	95	9813
21	1527	46	4491	71	7593	96	9866
22	1631	47	4618	72	7708	97	9913
23	1737	48	4745	73	7822	98	9952
24	1845	49	4873	74	7934	99	9983
25	1955	50	5000	75	8045	100	10000

Example

Example. Suppose a Cask containing 60 Gallons; the Bung Diameter 28 Inches, and the Liquor drawn off 7 Inches; then the wet Inches of the Diameter must be 21 Inches: The Question is, How many Gallons remain in the Cask?

Divide 7, the dry Inches of the Bung Diameter, by 28 the whole Diameter, add two Cyphers.

Thus, 28) 700 (25 Quotient.

56

140

140

Next, seek the Quotient 25 in the Table, and against it you will find 1955, which Number I multiply by the whole Content, 60 Gallons. Thus,

Against 25 the Number is 1955

60

Gallons 11|7300

From the Product I cut off 4 Figures (always) so that the empty Part of the Cask is 11 Gallons, and the Fraction 7300 makes near three Quarters of a Gallon, because 7300 wants about a Quarter of 10000.

Lastly, From the whole Quantity 60 Gallons, subtract 11 Gallons $\frac{3}{4}$, the Part empty, then the Liquor remaining in the Cask must be 48 Gallons, and a Quarter of a Gallon, the Answer. Or thus:

Divide the wet Inches 21, by the whole Diameter 28, adding 2 Cyphers, as before.

Thus, 28) 2100 (75 Quotient.

196

140

140

The Quotient 75 seek in the Table, and against it the Number 8045, which multiply by 60.

Thus, 8045

60

Gallons 48|2700

The Liquor 48 Gallons, the Answer ; only the Fraction 2700. being about, or somewhat more than a Quarter of a Gallon, because 2700 is about a Quarter of 10000.

Note, That if after Division there happen a Remainder or Fraction, and that be about half the Divisor, I take the next biggest Number ; or if it be less, then take half the Divisor, or the same Number which is the Quotient.

How many solid Inches are in an Ellipsis, or a Vessel like to an Egg ?

Suppose the Breadth or shortest Diameter is 16 Inches, and the Length 36, (as the Oval in the Carpenter's Work) and the mean Diameter will be 24 Inches, find the solid Inches, as in measuring a Globe.

Note, That if any Tun, Copper, or other Vessel, be uneven at the Bottom, put as many Gallons of Water therein as will cover the same, and let the Top of the Water be accounted as the Bottom of the Vessel, and find the superficial Inches thereof ; then try the Depth of the Copper in divers Places, add them together, and divide the Sum by the Number of Dipping-places, and the Quotient gives the Depth of the right Dipping-place ; which multiply'd by the Superficies or the Content of the Inches of the superficial Water, this last Product gives the Content in Inches.

To gauge a round Bowl, or the Bottom of a Furnace.

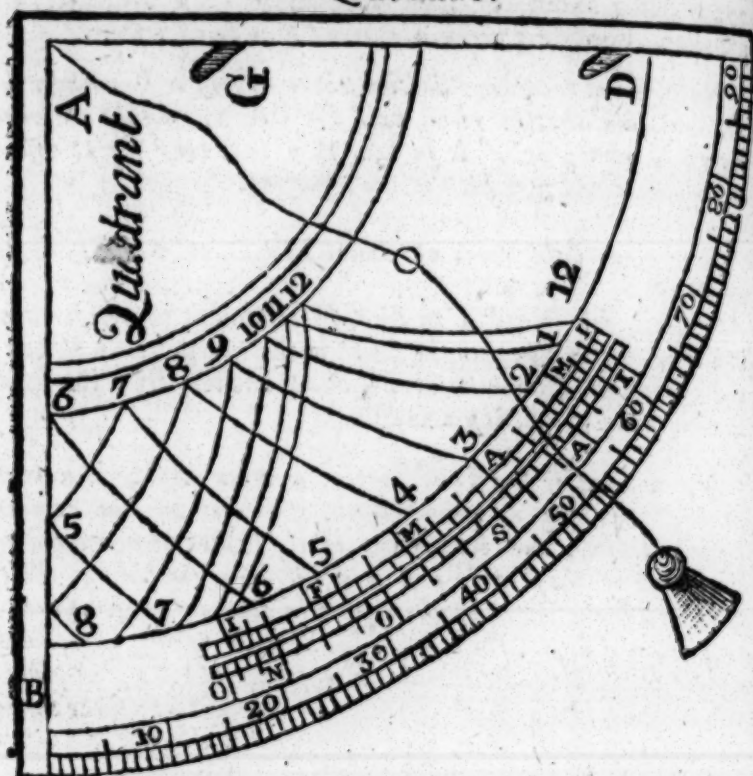
Suppose the Bowl is full of Water ; first, Measure the Surface of the Water, (as you measure a round Table) or multiply half the Circumference by half the Breadth or Diameter, and that Product gives the Content in square Inches ; then measure the Depth of the Water in several Places, and add them together, and divide the Sum by the Number of Depths you took, and the Quotient gives the mean Breadth sufficiently exact for common Practice.

Lastly, Multiply the mean Breadth by the Inches on the Surface of the Water, and the Product gives the Content in square Inches ; and the Way to reduce those Inches into Gallons, Pints, &c. is taught at the Beginning of Gauging.

N. B. The more Dipping-places you take, the more exact your Work will be.

A Descrip-

A Description of that most useful Instrument, commonly called
a QUADRANT.



FIRST, That outward Limb or circular Part is the fourth Part or Quarter of the Perimeter of a Circle, contain'd between the two Semi-diameters, or straight Sides, and divided into ninety equal Parts or Degrees, figured 10, 20, 30, &c. to 90.

2dly, Above these Figures, 10, 20, 30, &c. are the Capital Letters I A S O, &c. going from the Right-hand to the Left; and above these I F M, &c. going from the Left hand to the Right, signifying the several Months of the Year, viz. the uppermost *January, February, March, &c.* the lowermost *July, August, September, &c.* each Month is divided into 6 Parts, each Part representing 5 Days, &c.

3dly, Above the Letters for the Months are Figures and Lines expressing the Hours of the Day.

4thly, Upon the Side G D are, or should be, two thin Plates of Brass small Needles, &c. with a small Hole in each, called Sights, exactly of the same Height.

Lastly, In the Center of the Circle, or Meeting of the Semi-diameters A B—G D, is drove a small Stud, &c. from whence a Thread, with a Lead at the End of it, is suspended

Suspended, and a small Bead, Bit of Lead, &c. so fastened to the String, as to be moveable at Pleasure.

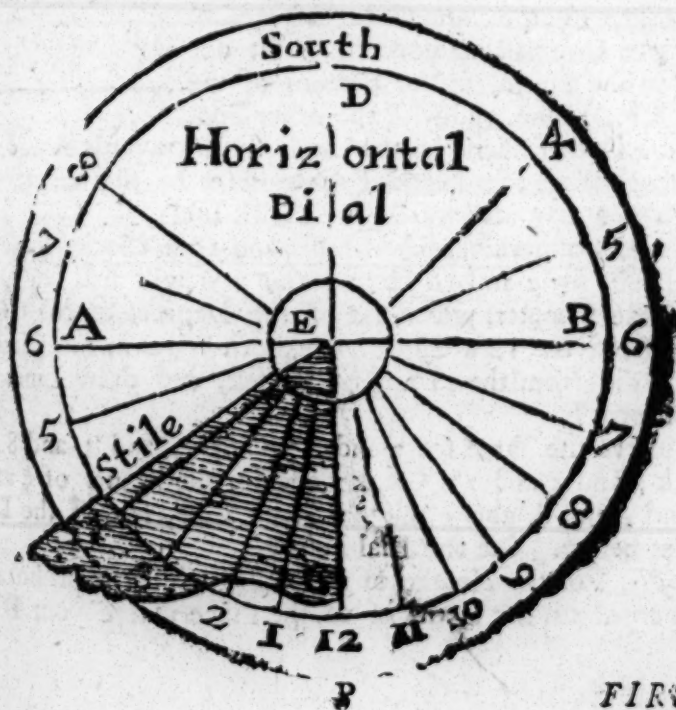
The Use of the Quadrant. First, To know the Hour of the Day.

Lay the Thread just over the Day of the Month, then
 slip the Bead till it touch the 12 a Clock Line; then turn
 your Back to the Sun, and let the Sun shine through the
 Sight-Hole at G, and come through the other at D, the
 Thread hanging freely, the Bead will rest upon the Line
 that shews the Hour of the Day.

To find the Height of a Tree or Steeple.

Hold up the Quadrant, and look at the Top of the Tree, Steeple, &c. till you see it through both the Sights, stepping backwards or forwards, &c. till the Line and Plummets hangs freely in the Middle of the Quadrant, viz. upon 45 Degrees, then will the Height of the Tree, &c. be exactly equal to the Distance of it from the Place where you stand; but if the Line should fall upon 22 Degrees and half, then the Height of the Steeple, &c. will be twice your Distance from it; and if this Line cuts 72 Degrees and a half, then is the Height but half your Distance from it, &c. Note, You must subtract the Height you hold the Quadrant out of it.

An easy Way to make a Post Dial, commonly called an Horizontal Dial, because it faceth the Sky over your Heads, lies level to the Horizon, or Earth we tread on.



FIRST.

FIRST, With a Ruler and the Point of the Compasses, &c. draw a Line on Paper, (at any Length) as the Line AB in this Dial; then cross it at right Angles with another Line, as the Line DC, and South on the Top, as in this Dial, which Line DC is the 12 a-Clock Line, and the Line AB the 6 a-Clock Line.

Next, Open the Compasses, and set one Foot at the Beginning of the Degrees, or Arch-Edge of the Quadrant, before described, and extend the other Foot to 60 Degrees; with that Extent set one Foot in the Center of the Dial by E, that is, just where the first Lines cross each other, and draw the Circle ABCD.

Next, Taking the Line EC for the 12 a-Clock Line, now to know what Distance I shall set off from it, for 1 a-Clock and a 11 a-Clock, because the Hours in the Morning and Afternoon, that are equally distant from Noon or 12 a-Clock, are the same, viz. 11 1; 10 2; 9 3, &c.

I look in the little Table in the Margin, and in the second Column I find against 1 Hour and 11, 11 Degrees, 55 Minutes, which I take off the Edge of the Quadrant thus; I set one Foot of the Compasses (as before) at the Beginning of the Divisions, (under B) and open the other Foot to almost 12 Degrees at C; the Compass so opened, I set one Foot in the Circle, at the Bottom of the 12 a-Clock Line, and with the other Foot make a Dot or Mark in the Circle, both towards A and B, and from those two Marks I draw Lines to the Center E, which you may afterwards black with Ink.

52 Degrees.			
D. M.		Hours.	
11	55	1	11
24	26	2	10
38	13	3	9
53	44	4	8
71	9	5	7

Next, To mark the Hour for 2 and 10 a-Clock, look in the Table for 2 and 10 Hours, and you will find 24 Degrees, 26 Minutes, which set off the Degrees of the Quadrant from the 12 a-Clock Line both Ways in the Circle, as you did from the 11 and 1 a-Clock, and draw Lines to the Centre E.

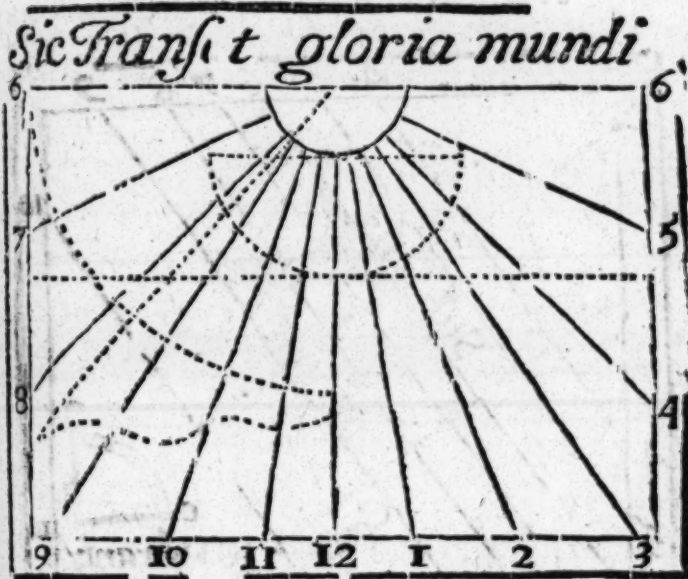
Observe the same for 3 and 9 a-Clock; and 4 and 8 a-Clock; and 5 and 7 a-Clock; and for the Hours of 5 and 7, and 4 and 8, above the 12 a-Clock Line, set off the Distances below. See the Dial before.

Lastly, For the Height of the Stile, which must be always equal to the Latitude of the Place where your Dial

is

to be used ; as, suppose 52 Degrees, take it off the Edge of the Quadrant, as above, with the Compasses, and with that Extent set one Foot at the Bottom of the 12 a-Clock Line, as you did before, and extend the other Foot in the Circle, and make a Mark, and draw a Line from thence to E, the Centre ; for the Edge, as you may see in the Dial, is shaded with short Lines, but the Stile is to stand upright in the 12 a-Clock Line, and it will cast a Shadow upon the true Hour of the Day.

To make a South Erect Dial.



THE making of this Dial differs very little from the former, as you may see by this Figure, only the Stile of this Dial is to be the Height of the other Part of the Quadrant, as 30 Degrees, the other being 52, or made according to the Latitude of your Habitation, and the Stile of this South Dial, the outward Edge is a dotted Line between the Hours of 8 and 6.

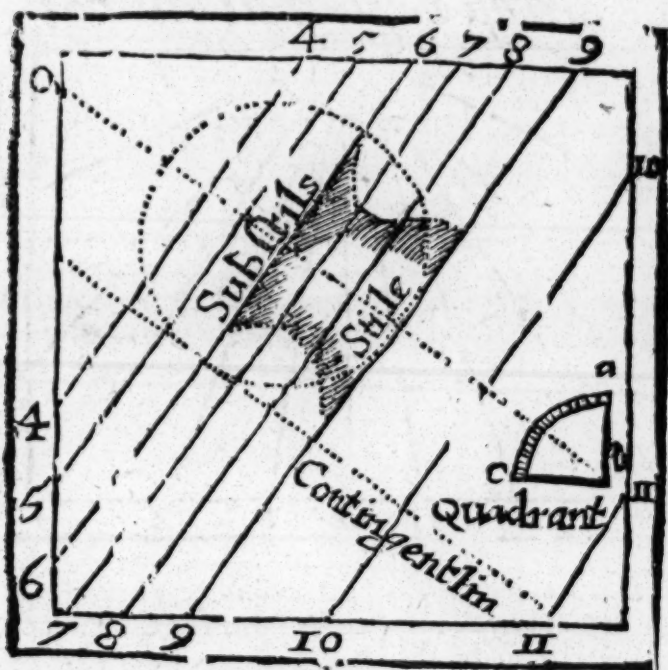
Note, That the Dial above serves for a Wall facing the South ; but if you turn the same Dial upside down, it will serve for the North side of the Wall, if the Line marked 7 be marked 5, and the Line 8 with 4, the Line 5 with 7, and the Line 4 with 8, all other Hour Lines in this North Dial are useless ; because the Sun in England shines

on a North Wall, the longest Day, only before 6 in the Morning, and after 6 at Night.

Or you may make a South Dial by this little Table, as is directed of the first Post Dial.

52 Degrees.			
D. M.		Hours.	
9	22	1	11
19	33	2	10
31	36	3	9
46	48	4	8
68	26	5	7

To make an Erect Direct East Dial.



FIRST, On Paper draw a Quadrant like unto the Quadrant *acb* in this Dial, but of the Bigness of the Quadrant *ACE*, and figure it as that in the last mentioned Post Dial; let the Side thereof, *ab*, be upright, the Arch beholding the South, dividing the Arch into 90 Parts, (as is taught) beginning to number the Elevation of the Pole at *A* towards *C*, 52 Degrees, or according to the Latitude of your Dwelling; then lay a Ruler on the Center of

of the
with
give
Ne
the fa
to pla
Ne
Line
the H
Parts
and to
Lines,
gence,
Th
draw
the D
Fix
the P
Circle
may b
Not
you d
Dial
to a G
of the
Side, a
against
6, 5, 4
on the
That
Hour
to the
to the

Situated } b

of the Quadrant at B, and to 52 Degrees, and draw a Line with the Point of the Compasses, so long as your Paper will give Leave, which is the Line *Ob* in this Dial.

Next, Draw a Circle in the Line *Ob*, square-wise, to the same, (a Rule for it that follows) for the 6 a-Clock Line, to place the Stile on.

Next, On the Outside of the Circle draw a Contingent Line square-wise also to the 6 a-Clock Line, then divide the Half Circle next the Contingent Line into 12 equal Parts; then place a Ruler upon the Center of the Circle, and to each Mark severally made in the Circle, and draw Lines, when the Lines last drawn cut the Line of Contingence, there make Marks.

Then from the Marks made on the Contingent Line, draw Lines parallel to the 6 a-Clock Line, as the Figure of the Dial before sheweth.

Fix the Stile upon the 6 a-Clock Line, perpendicular to the Plane, whose Height is to be Half the Breadth of the Circle, the outward Edge parallel to the Hour Lines, which may be made of Brass, Latten, or Wire.

Note, Whereas this Dial serves only to face the East, if you desire to make a West Dial, it is but taking your East Dial already drawn upon Paper, and lay the Face thereof to a Glass Window, and draw the same Lines on the Back of the Paper Dial; so you will have an East Dial on one Side, and a West Dial on the other; having first set Figures against the Hour Lines, that is, instead of 11, 10, 9, 8, 7, 6, 5, 4, in the East Dial, you must set against the same Lines on the West Dial, 1, 2, 3, 4, 5, 6, 7, 8, &c. *Also note*, That you are to place no Lines on these Dials, besides the Hour Lines; and if you have a Glass Window facing either to the East or West, you may paste the Face of one of them to the Glass, fixing a Wire through the Lead of the Stile.

E N G L A N D.

D. M.

Situat	} between	12 00	} of Lon- gitude. of Lati- tude.	} Its great	} Length from N. to S. is about 320 Miles. Breadth from E. to W. is about 290 Miles.
		20 00			
		50 00			
		55 50			

It is divided into Six Circuits, viz.		Western, Oxford, Home, Norfolk, Midland, North,	Chief Towns,	Salisbury, Oxford, Canterbury Norwich, Lincoln, York,
Western Circuit	contains	Cornwall, Devonshire, Dorsetshire, Hantsire, Somersetshire, Wiltshire,	Chief Towns,	Launceston Exeter, Dorchester, Winchester, Bristol, Salisbury,
Oxford Circuit	contains	Berkshire, Oxfordshire, Gloucestershire, Monmouthshire, Herefordshire, Worcestershire, Staffordshire, Shropshire,	Chief Towns,	Reading, Oxford, Gloucester, Monmouth, Hereford, Worcester, Stafford, Shrewsbury,
Home Circ.	contains	Essex, Hertfordshire, Kent, Surry, Suffex,	Chief Towns,	Colchester, Hertford, Canterbury, Southwark, Chichester,
Norfolk Circuit	contains	Norfolk, Suffolk, Cambridgeshire, Huntingtonshire, Bedfordshire, Buckinghamshire,	Chief Towns,	Norwich, Ipswich, Cambridge, Huntington, Bedford, Buckingham.
Midland Circuit	contains	Lincolnshire, Nottinghamshire, Derbyshire, Rutlandshire, Leicestershire, Warwickshire, Northamptonshire.	Chief Towns,	Lincoln, Nottingham, Derby, Okeham, Leicester, Warwick, Northampton.
North Circuit	contains	Yorkshire, Durham, Northumberland, Lancashire, Westmorland, Camberland.	Chief Towns,	York, Durham, Newcastle, Lancaster, Appleby, Carlisle.

Middlesex and *Cheeshire* are not commonly reduced to any of these Circuits; the first, because of its near Neighbourhood to *London*, and the other as being a County Palatinate, having its own Judges and Counsellors peculiar to itself.

England is bounded on the East by Part of the *German* Ocean; on the West by *St. George's Channel*; on the North by *Scotland*; and on the South by the *English Channel*. The Air of this Country is mild, sweet, and temperate, not piercing cold in Winter, not scorching in Summer. The Sun shines, or is above the Horrizon the longest Day in the northermost Parts, about 17 Hours and a half, and on the shortest in the southermost, almost 8 Hours; and the Nights are proportionably long, hot, cold, &c. The chief Commodities are Corn, Cattle, Tin, Copper, Lead, Iron, Timber, Coals, Wool, Cloth, Stuffs, Linen, Hides, Tallow, Butter, Cheese, and Beer, &c.

The Counties, Cities, Market Towns, and Parishes in England and Wales.

Counties in Eng- land.	Cities.	M. T.	Par.	Counties in Eng- land.	Cities.	M. T.	Par.
Bedford	0	10	116	Salop	0	14	170
Berks	0	12	140	Somerset	3	31	383
Buckingham	0	13	185	Stafford	1	18	130
Cambridge	1	8	163	Suffolk	0	30	575
Chester	1	13	85	Surry	0	8	140
Cornwall	0	20	161	Sussex	1	11	312
Cumberland	1	15	58	Warwicke	1	15	158
Derby	0	10	106	Westmorland	0	9	26
Devon	1	31	394	Wilt	1	25	304
Dorset	0	20	248	Worcester	1	11	152
Durham	1	6	118	York	1	49	563
Essex	0	21	415	W			
Gloucester	1	26	280	Anglesey	0	2	24
Hantshire	1	16	253	Brecknock	0	4	61
Hertford	0	18	120	Cardigan	0	4	46
Hereford	1	7	176	Carmarthen	0	8	81
Huntington	0	6	79	Carnarvan	0	6	68
Kent	2	29	408	Denbigh	0	4	57
Lancaster	0	26	61	Elint	0	3	28
Leicester	1	12	192	Glamorgan	0	9	118
Lincoln	1	15	630	Merioneth	0	3	37
Middlesex	2	7	73	Montgomery	0	8	47
Monmouth	0	7	227	Pembroke	0	8	145
Norfolk	1	31	660	Radnor	0	4	59
Northampton	1	13	326	Ilands.			
Northumberland	0	6	460	Man-Island	0	5	14
Nottingham	0	9	168	Wight-Island	0	1	14
Oxford	1	15	280	Jersey	0	1	12
Rutland	0	2	48	Guernsey	0	1	10

The Use of the foregoing Table.

The first Column is the Names of the Counties in *England* and *Wales*. The second, the Number of Cities. The third, the Number of Market-Towns. The last Column, the Number of Parishes.

The Number of Shires in *England* and *Wales* are 52. Parliament Men 510. Market-Towns 713. Parishes 9291. Bishopricks 26. Castles once 186. Rivers 555. Chafes 13. Forests 68. Parks once 781. Cities 25. Bridges 956. Universities 2.

Note, The *Shires*, it is said, were first made by King *Alfred*, (about the Year of our Lord Christ 880) for the easier and speedy Administration of Justice.

Note likewise, That instead of *Hundreds*, *Durham* is divided into *Wakes*, *Cumberland* and *Westmorland* into *Wards*.

Also some Counties are more generally divided than into *Hundreds*, as *Yorkshire* into three *Ridings*; *Kent* into five *Laths*; *Sussex* into six *Rapes*; *Lincolnshire* into three *Parts*, as *Lindsey*, *Keystven*, and *Holland*.

Monthly Observations in GARDENING.

JANUARY. There is little to be done in Gardens this Month; but you may gather Sheep's Dung to mix with Earth to lie rotting a Twelve-month, to lay Flowers with: And you may cut off the downright Roots of such Trees as yearly bloom, and bear no Fruit, burying a dead Dog or Cat under the Tree; often casting Soap-Suds near the Root, or the Dirt of the Sinks of Wool-Combers, or Street-dirt of the Sinks of great Towns.

FEBRUARY. If the Frost have killed the Cabbage-plants you set in *September*, sow the Seeds now in a Hot-Bed thus made: Dig a Grave of what Length and Breadth you please, (where the Sun shines most, and shelter'd from the North and East Winds) about two Foot deep, tread it full of Horse-Litter, with the Dung, and cover the Dung near half a Foot thick, with fat Earth sifted, covering it with Pease-Straw or Mats, only in cold Nights; the Seeds also of Musk Melons, Colliflowers, Cucumbers, Purslain, and Lettice, may be sow'd therein. You may now plant the Suckers of Currants and Gooseberries, tho' *October* is the best Time: Sow Garden Pease; for the Beans, set them about one Foot asunder with a Setting Stick.

MARCH.

MARCH. Trim the Leaves of Clovegilliflowers with a Pair of Scissars; sow Parsley, Carrots and Turnip Seeds and Parsnips; and set Carrots and Turnips to raise Seed? set Onions and Leeks to put the Tops among Pot-herbs; prune the Apricot late; take the Litter from off the Asparagus Bed; dig it with a Fork a little, and sift some good Earth thereon; if you make a new Bed, do it as the hot Bed last Month, and lay the same Roots you may buy of a Gardener on it; or you may sow the Seeds in a Bed of good Earth, and it may do well enough, so as you take off all Weeds, and it is not so tender, that it needs covering in Winter, but to fatten the Bed, and cover them by sifting Earth on them, and let them run to Seed two Years before you cut the Buds to eat; dig the Weeds and Tops of the Artichoke into the Bed, laying the Earth level, leaving but one or two of the strongest to each Root, casting away the Suckers: Plant the shortest stalked Cabbage-plants near a Yard asunder; setting them pretty deep on the Edge of your Carrot-ground; being set one Month, draw Earth upon one Side of the Stalks to lay them flat upon the Earth, and they will cabbage the better; sow Clovegilliflower Seed. A Parsley Bed may serve for Use many Years for a Family, if you take Care to pluck off such Shoots, as are likely to shed, as often as you see them seed. When you see the Tulip-leaves begin to peep out of the Earth, spread your Flower-Garden all over with fat sifted Earth, mention'd in *January*, or Wood-Pile Earth, or the Earth that Moles work up in a rich Pasture, and when you see a very great Hill lately cast up, dig to the Bottom to find her Nest. Now you may dig in rotten Horse-dung into your Garden, set more Beans and Pease, and graft.

APRIL. In this Month, chuse the Evening of a rainy Day to set the Cuttings of Thyme, Hyssop, Marjoram, Savory, Penny-Royal, Balm, Mint, &c. for Winter Greens. Hedges to be clip'd square after Rain, often letting such Herbs grow out of the Flower Garden for Use: You may also part the Roots of most Things, cutting off their Tops and most of their thready Roots before you set them: The Boughs of Fruit-trees, that grow too near each other, may be set at some certain Distances, with Weights or Cords, to remain so for four or five Weeks. Young Fruit-trees should be slit in the Bark from the Head to the Root, at three or four Sides, to prevent their being Hide-bound. Cut off all the dead Twigs out of Bays, Laurel, Roses, and all other

Bushes ; plant Colliflowers, and cut off the Strings of all Strawberries, except the Wood and white ones ; remove the young Clovegilliflower Plants sowed of Seed the last Month ; set Rosemary-Slips (twisting the Ends) very close to a Wall, and with Leathers nail it thereto while it is young, but not too close to the Wall. If the Vine hath no Leaves before the 20th Day of this Month, all the cold Weather is not past.

MAY. Dig Dung into a Bed to sow Purslain in. If the Ground is not wet nor cold, sow Scarlet and Kidney Beans in light Ground, covering them lightly, because a Bean comes up and turns up two Leaves. Where any Places of your Crop or Carrots miss coming up, there make Holes like deep Scuttles, which tread almost full of Horse-dung, covering them with Earth ; (see *bot Bed* in February ;) and sow Cucumbers therein, nip off the superfluous Branches, and watering when Need is. The Garden Beans being in full Bloom, clip off the Tops of the Stalks, and the Tops of other Bushes, where they crumple up, because Vermin breeds in them. Tulip-Leaves being dry, you may take up their Roots ; and being dried from the Dirt, put them in a Box, and cover them with Sand : Take them up once in three or four Years if you will, and set them again in *September* : Put the Off-sets in a Bed by themselves ; if you take not up the Roots, cut not off their Leaves.

JUNE. From your Fruit-trees cut off all Bruises, Gums, Stubs of dead Wood, and cankered Places. Take up the *Anemomy* Roots, and dry them, and set them again in *February* ; (see *Inoculating*.) Having gathered all your Roses, clip the Tops of the Bushes, and the Tops of your monthly Rose often in Summer. To increase the double Stockgilliflower, about this Time, cut off a Slip about five or six Inches long, that is, a pretty strong one that never had a Flower on it, nor like to have one that Summer, then turn up the Bark about an Inch, cutting the Sides thereof, so as the Bark may stand like the Spokes of a Cart-wheel, and cut off the woody Inch, and set it pretty deep in some shady Place, first cutting off the Top to the Bud, and the other Leaves shading, and watering it for a Time ; cut only the longest Tops of your Rasp Hedge even with the other.

JULY. Gather the Seed of Clove-gilliflowers, and keep it in the Husk till you sow it in *March* or *August* ; and by the Middle of this Month finish the Layering them. Having gathered

thered your Strawberries, cut off all the Leaves after Rain, (except the Bed of White and Wood Strawberries) which you may thin and weed at the latter End of *March*, and soon after that make a new Bed, by setting the smallest Roots, pressing the Earth very hard to them, that the Worms force them not out; remembering that they will want Water often, as do Colliflowers, Cucumbers, &c.

AUGUST. Sow the first ripe Cabbage Seed, also Coleworts, Turnips, Marygolds, Box, Poppies, Spinage, and Lettice; sow the Seeds of *Auriculus*, or *Bears-Ears*, in a Pot of good Earth; let it stand abroad; the next Summer plant out the strongest. If the Earth is well soked with Rain, this is rather a better Time than *April* to take up all the Herbs and Flowers, and to dig Horse-dung therein that is very rotten. Now layer Bays, Lawrel, Rosemary, &c. as is shewed of Clovegilliflowers, only instead of cutting that Place of them that is to lie under the Earth, run a blunt Awl three or four Times thro' the Place: In *March* following you may remove them, if taken Root, or stay till this Month. Clip off all the Stalks and Leaves from your Strawberries, except white, and Parsly, and Sorrel, also your Pot-Herbs; and new Leaves will soon grow again.

SEPTEMBER. Dig a little Dung into a Bed, and therein set your strongest Cabbage-Plants, about two Inches asunder; water them very well that Evening, and no more; do so with the Plants of Coleworts, Marigolds, and Lettice; set the Tulip Root you take out of the Earth thus; With a narrow Trowel make a Hole, then put in a Handful of Sand, on which set the Root, and earth it up; the Sand is to prevent the Root from growing too deep in the Earth. Having cut off the Stalks of your Clovegilliflowers, set little short Sticks, and tie them to such Branches as may be beaten flat by Snow or Rain. Gather Apples after full Moon. Turnips and Carrots laid in Sand are a good Ballast for Ships at Sea.

OCTOBER. If you desire a Nursery for the raising of Stocks to graft on, sow the Seed of Crabs, and the Stones of other Fruit, and covering the Beds with Horse Litter until *March*; at two Years End pluck up the strongest, and cut off all their Boughs close to their Bodies, and a little off the Tips, and all the strongest Roots close, especially down-right Roots; then by a Line and a setting Stick set them near two Foot asunder, and at two Years End many of them may be ready to

to graft and inoculate on. Gather Fruit in a dry Day. Full Moon being past, the Bruises will not so soon rot: They best lay on Shelves in a Closet, where Frost cannot enter in Winter; but if the Apples happen to be frozen, touch them not until the Frost is gone out of them. In the same Closet fix small Lines, from one Side to the other, to hang your Bunches of Grapes on, being cut off the Vine at the Beginning of *October*; and then prune your Vines, cutting off all the young Branches within two or three Inches of the main Branches to keep all Winter. Gather not the Grapes until they are soft, tho' the Frost comes: Better to have them withered than unripe; but if they continue green and hard till *November*, then make Vinegar of them.

NOVEMBER. If you desire to raise Cabbage-seed, pluck up the best Cabbage by the Root, and set it again in some Sunshiny Place so deep, that you can but see the Crown of it. Cut the Tops of your Artichokes, and make Trenches between the Rows, casting the Earth upon the Roots as a Bank, and cover all the Bed with Horse-litter; also cover the Asparagus Bed with Horse litter or good Earth.

DECEMBER. If you did not prune your Vine soon after you gathered the Grapes, now nail the strongest to the Wall with Shoemakers Leather, each Branch near one Yard asunder, cutting off all the young Shoots within an Inch of each Knot, so will your pruning Work be little yearly. But when you have a long young Branch that begins near the Root, you may nail that to the Wall, and cut off an old Arm; by this Means, in Time, you may cause your Vine to look young again; yet the fewer Branches any Fruit-tree hath, the larger will the Fruit be. Lay Beasts Blood and Sheeps Dung to the Roots; or about half a Yard from the Body of your old Vine, you may pour a Quart of Man's Urine twice a Week, or oftner. And in a very dry Time, wrap a Lint of Woollen about the Body, and the other End into a Bottle of Water, and it will suck out the Water.

Of INOCULATING, or GRAFTING.

GRAFTING is an artificial Transposing or Transplanting of a Twig or Scion, a Bud or Leaf taken from the Tree, or of some other Kind, and placed or put to, or into, that of another, called *Grafting in the Cleft*.

The best Time for gathering Grafts is in the Middle of *February*. Observe that the Scion is to be cut below the Knot.

Grafting

Grafting in the Cleft. — First cut or saw off the Top of the Stock to a curious Smoothness ; then cut two Gashes with a sharp Knife ; then with small Wedges, sharpened according to the Bigness of the Graft, being thrust in, raise the Bark of the Stock, and put in the Graft, exactly shaped as the Wedge ; then close it hard with your Hand, and bind it about with Clay and Horse-dung mixed. In this Manner may any Fruits be grafted, whether Apples, Pears, Plums, Cherries, &c. The Apple is commonly grafted on Crab-Tree Stocks.



THE
FAMILY COMPANION:
CONTAINING

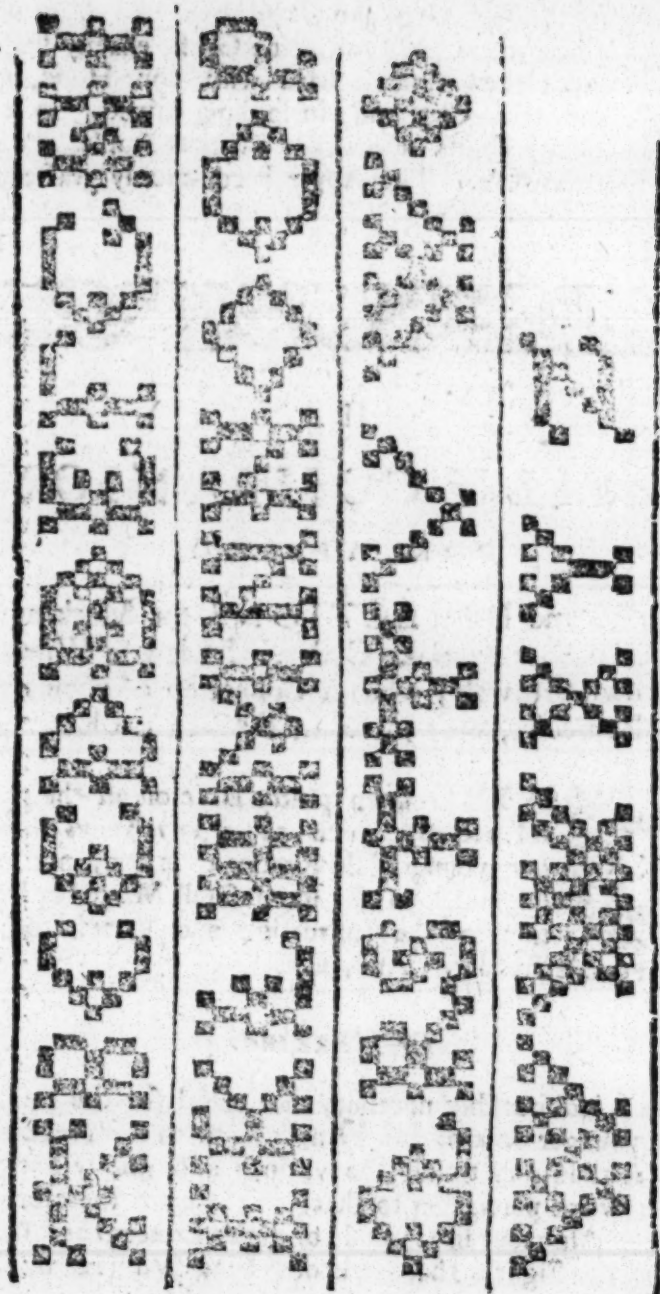
RULES and DIRECTIONS for Marking on Linen ; how to make Cyder, Mead, and Wines of our own Growth ; with a Collection of choice and safe Remedies, very useful in FAMILIES.

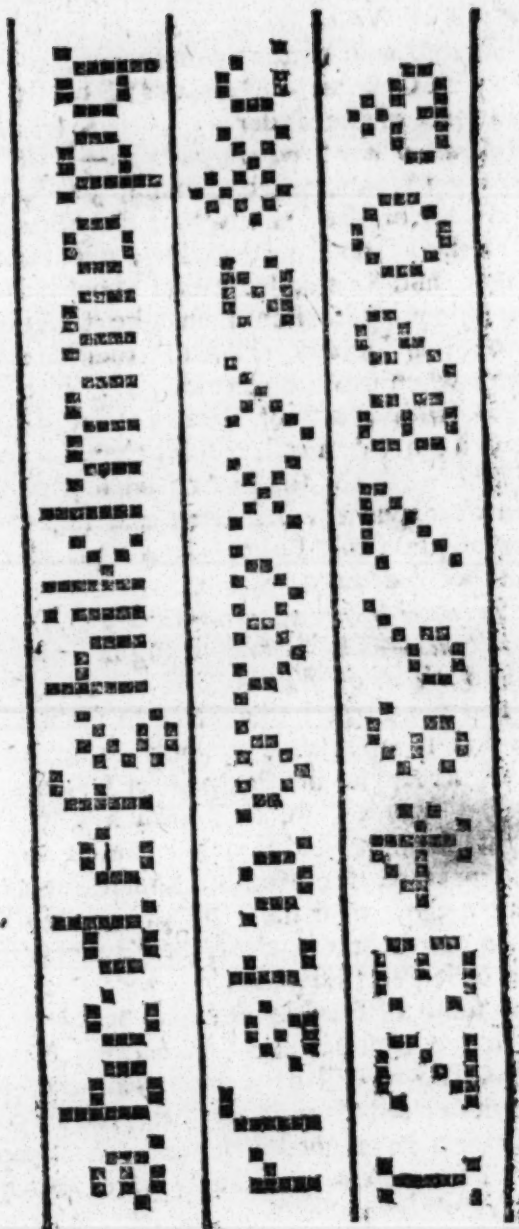


HAVING been pretty large on all the general Heads, which could any Ways inform our young Male Reader ; it may not now be amiss to say some small Matter in Relation to the Instruction and Benefit of the young Female Reader. And, first,

Of MARKING.

This is indispenfibly necessary and useful for the training up the younger Sort of the Female Kind to the Needle, it being introductory to all the various and sundry Sorts of Needle-Work pertaining to that Sex ; I have therefore set down the Alphabet in Capitals or great Letters, and small, likewise the Figures that Girls or young Women, by frequent Practice, may soon attain to Perfection in marking on Linen. - Here follow the Marking Copies.





How to make good Cyder.—Stamp ripe Apples, and fill a Barrel with their Juice, to which put six bruised Pearmains, stop it not very close; at six Weeks End draw the Clear into a Tub, that is clean wash'd and dry'd, and put to it a Beer Glafs full of White Wine, wherein an Ounce of Isinglass is dissolved, and beaten with the White of an Egg; and to every 24 Gallons put 8 Pounds of brown Sugar well dissolved in some of the Cyder.

To make Mead at any Time of the Year.—Take Water 10 Quarts, Honey 1 Quart, Sugar 1 Pound, 30 Cloves, a Race or two of Ginger bruised, and two or three Sprigs of Rosemary; when the Water is near boiling, put into it the Honey and Sugar, and Spices, let it boil about half a Quarter of an Hour (skimming it often) then take it off the Fire, and squeeze into it four Lemons, and break their Rinds, and put them in also; when it is almost cold, cover it in the Vessel, or Steen Pot, with Toasts of Wheaten Bread; first cover the Toasts with Barm or Yeast, and lay them on the Liquor; and when it has wrought (like new Ale) four or five Days, and will run clear, put it into Bottles, and stop them close; it will keep long in a cold Place. It is a pleasant Drink in Summer, in hot Weather.

To make Wines of our own Growth.

Gooseberry Wines.—The Berries being mellow, put them by Parcels into a Tub of Water, (and cast out those Leaves that swim) and put them into a Sieve to drain out most of the Water, and stamp them, or only crack them in a Trough Bowl, as Apples are stamped for Cyder; then put those Stampings into a Tub, that hath a Tap and Tap-Hose, and put almost twice as much cold Water to them as the Stampings are, for Moisture; then stir them well together, cast a Cloth over the Tub, and at the End of ten Days draw it out, if it run clear, or stay longer; and to every Gallon of it put 3 Pounds of brown Sugar, dissolving the Sugar in some of the Liquor; and put it into a fresh Barrel, and stop it close; and at *Michaelmas* draw it into Bottles. *Note*, If you will have your Wine red, put some red Gooseberries or red Currants to them, when you stamp them; and if you have not Berries enough, stamp Apples with them. Thus you may make Wine of other Berries, or Fruit, with little Trouble.

Currant Wine.—Pick a Pound of the best Currants, and put them in a deep strait-mouth'd Earthen Pot, and pour upon

upon them about 3 Quarts of hot Water, having first dissolved therein 3 Spoonfuls of the purest and newest Ale Yeast, stop it close till it begins to work, then give it Vent, as is necessary, and keep it warm for about three Days; it will work and ferment; taste it after two Days, to see if it be grown to your Liking; then let it run thro' a Strainer, to leave behind all the Currants and the Yeast, and bottle it up; it will be very quick and pleasant, and is admirable good to cool the Liver and cleanse the Blood; it will be ready to drink in five or six Days after it is bottled, and you may drink it safely.

Strawberry Wine.—Bruise the Strawberries, and put them into a Linen Bag, which hath been a little dyed, that so the Liquor may run thro' more easily; hanging the Bag at the Bung in the Vessel. Before you put in your Strawberries, put in what Quantity of Fruit you think good, to make the Wine of a high Colour; during the Working leave the Bung open, and when it has worked enough, stop your Vessel. Cherry Wine is made after the same Fashion, but then you must break the Stones.

Cherry Wine.—Take the Syrup of Cherries, and when it hath stood a while, bottle it up, and tie down the Cork, and in a short Time it will be pleasant Wine.

Black Cherry Wine.—Take a Gallon of the Juice of Black Cherries, keep it in a Vessel close stopped, till it begin to work, then filter it; and an Ounce of Sugar being added to every Pint, and a Gallon of white Wine to the Whole, keep it stopped for Use.

To make Jelly of Currants.—The Berries being mellow, put them with their Stalks by Handfuls into a Cloth, and strain out the Juice; boil the Juice with its Weight in Sugar to a right Thickness; skim it often.

To make Marmalade of Quinces.—Having par'd, quarter'd and coar'd them, put them into a Pot, and bake them with Town-Bread; then bruise them well, and boil them, with its Weight in Sugar, to a just Thickness. Good against Fluxes.

To preserve Cherries.—Take some of the worst Cherries, and boil them in fair Water, and when the Liquor is well coloured, strain it; then take some of the best Cherries you can get, with their Weight in beaten Sugar; then lay one Laying of Sugar and another of Cherries, till all are laid in the preserving Pan; then pour a little of the Liquor of the

the worst Cherries into it ; boil your Cherries till they be well coloured ; then take them up, and boil the Syrup till it will button on the Side of the Dish ; and when they are cold put them up in a Glass covered close with Paper, until you use them.

To candy Pears, Plums, Apricots clear as Amber.—Take your Apricots or Plums and give every one a Cut to the Stone in the Notch ; then cast Sugar on them, and bake them in an Oven, as hot as for Manchet, close stopt ; let them stand Half an Hour ; then lay them one by one upon Grass-Plats, and so dry them. In this Manner you may candy any other Fruit.

To preserve green Walnuts.—Boil your Walnuts till the Water taste bitter, then take them off, and put them in cold Water, and peel off the Bark, and weigh as much Sugar as they weigh, and a little more Water than will wet the Sugar ; set them on the Fire, and when they boil up take them off, and let them stand two Days, then boil them once more.

To preserve Currants.—Part them in the Tops, and lay a Laying of Currants, and a Laying of Sugar, and so boil them as fast as you do Raspberries ; do not put them in the Spoon, but scum them ; boil them till the Syrup be pretty thick ; then take them off, and let them stand till they be cold, and put them in a Glass.

To preserve Damsons, red or black Plums.—Take the Weight in Sugar, and Water enough to make a Syrup to cover them, so boil them a little therein, being close covered, turning them for fear of spotting ; let them stand all Night in their own Syrup, then set them upon a Pot of seething Water, and suffer your Plums to boil no faster than the Water under them ; and when they are both sweet and tender, take them up, and boil the Syrup again till it is thick, then put up your Plums and it together in your preserving Glasses.

To preserve Gooseberries.—Take Gooseberries, or Grapes, or Barberries, and take somewhat more than their Weight in Sugar beaten fine ; lay one Laying of Fruits, and another of Sugar, till all are laid in your preserving Pan ; then take 6 Spoonfuls of fair Water, and boil your Fruit therein as fast as you can, until they be very clear, then take them up, and boil the Syrup by itself till it be thick : When they are cold, put them in Gally-pots.

To

To dry Cherries.—Take six Pounds of Cherries and stone them; then take a Pound of Sugar and wet with the Juice of the Cherries, boil it a little, then put in your Cherries, and boil them till they are clear; let them lie in the Syrup a Week, then drain them from the Syrup, and lay them on thin Boards to dry; wash off the Clamminess with warm Water, and dry them a little longer.

To dry Pippins—Take the fairest yellow Pippins, pare them, make a Hole thro' every one, then parboil them in a little fair Water, then take them up, and put them in as much clarified Sugar as will cover them; let them boil gently a little while in that Syrup, then take them out and put them into an Earthen Platter, and cast fine Sugar upon them and set them in the Oven Half an Hour; then take them out and cast some more Sugar on them, (being turn'd) and so 3 Times, and they will be well dried.

To make Verjuice.—Gather your Crabs as soon as the Kernels turn black, and lay them a while in a Heap to sweat; then pick them from the Stalks, Blacks and Rottenness, then crush and beat them all to Pieces in a Tub, then take a Bag of coarse Hair-cloth as big as your Press, and press it as long as any Moisture will drop out, having a clean Vessel underneath to receive the Liquor; then tun it up in sweet Hogsheads, and to every Hogshead put six Handfuls of damask Rose Leaves, then bung it up, and use it as you have Occasion.

To preserve Barberries.—Take 1 Pound of Barberries pickt from the Stalks, put them in a Pottle Pot, and set it in a Brass Pot full of hot Water, and when they be stewed, strain them, and put to them a Pound and a Half of Sugar, and a Pint of red Rose Water, and boil them a little; then take Half a Pound of the fairest Clusters of Barberries you can get, and drop them in the Syrup while it boiled; then take the Barberries out, boil the Syrup while 'tis thick, and when cold, put them in the Glasses with Syrup.

To make white Mead.—Take 6 Gallons of Water, and put in 6 Quarts of Honey, stirring it till the Honey be thoroughly melted; then set it over the Fire, and when it is ready to boil, scum it very clean, then put a Quarter of an Ounce of Mace, and as much Ginger, Half an Ounce of Nutmegs, sweet Majoram, broad Thyme, and Sweet-Brier, of all together an Handful; and boil them therein; then set it by till it be thoroughly cold, and then barrel it up, and keep it till it be ripe.

To

To make Jelly of Apples.—Take either Pippins or John Apples, and cut them into Quarters, either pared, or unpared, boil them in a good Quantity of Water till it be very strong of the Apples; take out the clear Liquor, and put to it a sufficient Quantity of Sugar to make Jelly, with the Slices of Apples; boil all together till the Apples be enough, and the Liquor like a Jelly; or else you may boil the Slices in Apple Liquor without Sugar, and make Jelly of the other Liquor, and put the Slices into it when they jelly, and when it is sufficiently boiled, put to it some Juice of Lemon, and Amber, and Musk, if you will.

Experienced Medicines.

First, Learn these Physical Marks.

20 Grains	} make	a Scruple	℥	} thus marked.
3 Scruples		a Dram	ʒ	
8 Drams		an Ounce	℥	
12 Ounces		a Pound	℔	

Note, That a Decoction is boiling an Herb, &c. in Beer or Water, thus marked: Dec.

Ague.—Being hot in Bed (an Hour before the Fit is expected) drink the Dec. of Camomile, sweetned with Treacle, and sweat two Hours; or lay to the Writs, Soot, Mustard, Rue, and Pepper well mix'd together.

Again.—Take Salt of *Card. Benedict.* and Salt of Wormwood, of each 15 Grains, Tartar Vitriolate, half a Scruple; mix them and give them in a few Spoonfuls of *Rhenish* Wine, or some other convenient Vehicle, either before the Fit, or when the Stomack is empty.

To cure a Tertian Ague.—Take Crude Alum and Nutmeg, finely scraped, of each about half a Dram; mix the Powder well together, and with about six Grains of Saffron: Give this in two or three Spoonfuls of White-Wine Vinegar at the useful Time.

Fever.—Drink the Dec. of Camomile, and sweat in Bed divers Mornings; and the Dec. or Tea of Carduus to vomit; being covered take the Purge.

St. Anthony's Fire.—Take the Purge, and anoint with the Marrow of a Leg of Mutton, or Ointment Nutritum spread on Paper.

Burn or Scald.—Lay on a bruised Onion with Salt, and heal with Nutritum.

Bruises

Bruises inward.—Drink the Dec. or Tea of Comfrey, and eat Bread and Butter with Honey.

Bruises outward.—Apply green Wormwood, and Hyssop beaten to a Plaister; or Nutritum, for Cuts and black Bruises of the Eye.

Bound in the Body or Costiveness.—Take often Cream of Tartar mix'd with Honey.

Boils.—Eat Shred Rosemary with Bread and Butter often, and apply Wheat Flour and Honey mix'd, or take the Purge.

Bleeding at the Nose.—Stuff into your Nostrils Rabbit-Wool roll'd in Bole Armoniack, chew Periwinkle in the Mouth, and hold in your Hands Knot Grass and Solomon's Seal: Drink little.

Bellies swell'd in Children.—Apply fry'd Wormwood with fresh Butter, fresh for three Nights.

Blood purged.—Drink often the Tea of Centaury, or Ground-Ivy, or Sassafras Chips.

Asthma or Shortness of Breath.—Take of Turmeric, Liquorice, Brimstone, and Elecampane Roots, of each two Penny-worth, mix them with Treacle, or rather Honey; swallow some Morning and Nigh.

Cough.—Drink at going to Bed, Brandy, Treacle, and Sallad Oyl; or mix Butter and brown Sugar well; some at going to Sleep.

Consumption.—Take six Tar Pills, and drink after them Syrup of Sanicle, or Hoarhound. Or this, Take 1 Gallon of Spring Water, a Quart of Sack, and 2 Calves Hearts sliced thin, 100 of fresh red Roses, and a good Handful of Hoarhound; bake these in a Pot with the largest Sort of Town-Bread. Take six Spoonfuls often.

Galloping Consumption—Take Half a Pound of Raisins of the Sun, stoned, a Quarter of a Pound of Figs, a Quarter of a Pound of Honey, Half an Ounce of *Lucatellus's* Balsam, Half an Ounce of Powder of Steel, Half an Ounce of Flour of Elecampane, a grated Nutmeg, and one Pound of double refined Sugar pounded. Shred and pound all these together in a Stone Mortar, pour into it a Pint of Sallad Oyl by Degrees. Eat a Bit of it four Times a Day the Bigness of a Nutmeg; every Morning drink a Glass of old *Malaga* Sack, with the Yolk of a new-laid Egg, and as much Flour of Brimstone as will lie upon a Six-pence; the next Morning as much Flour of Elecampane, alternately.

Chops

Chops in the Hands.—Wash them with your own Urine, and dry it in by Fire ; or a Plaister of Melilot Salve.

Chops in the Nipples, or Lips.—Wet them with Raisins roasted in a Fire-shovel.

Kib'd Hands.—Soak them often in Water with Allum boil'd in it.

Colick by Wind of long Continuance.—Beat the Hips of wild Roses gathered in Winter into Powder, and half so much sliced Nutmeg, mix and take some in your Drink, and doubt not of a Cure.

Convulsion Fits.—Put the Powder of both, or either of the Roots of Piony in all your Drink, or the Juice of Rue.

Corns.—Apply a Plaister of *Diachylum cum Gummi*, or a Piece of new oil'd Hat Case ; so tender them and the hard Skin.

Cramp.—Every Night rub your Toes with Rosemary, and smell to it.

Weak Digestion.—Drink Dec. of Centaury, but no hot Liquors.

Dropsy.—Tun into all your constant Drink, Agrimony, Pelitory of the Wall, Dog Grass Roots, and the inner Peeling of the Boughs of Ash, and Alder, which powerfully provokes Urine.

Gout or Rheumatism.—Take an Ounce of Rhubarb, as a Purge every six Weeks, and apply Poppy Leaves between with Raisins ; (see *Dropsy*) but the constant chewing of Tobacco is the best ; and live on the plainest Diet, and drink no strong Drink, if you desire a constant Health of the Body.

Deafness.—If the Wax in the Ear be hard, then have the Oil of bitter Almonds dropp'd therein, and a Week after let it be syring'd with warm Water and Beer ; but if the Wax in the Ear be very thin, then put in a Tent dip'd in Melilot Plaister, and take sneezing Powder often, being warm in Bed.

Eyes dim.—The best Eye Water is your own Urine ; often wet your Eyes with it. *If full of Rheum, or you fear a Pearl or Webb is growing therein*—Take the Yolk of an Hen's Egg, and fill up the Place with the Juice of Housleek, and set the Shell on hot Coals to simmer a good while, it being covered ; then put the clear into a small Glass Bottle, put a Drop thereof to the Eye every Night : Or use the distilled Water of Half-Moon Grass ; continue the Use of this some Months, and take the Purge.

Flux.

Flux.—
Half so m
Loaf Sug
Or boil a
Quarter o
Quart of
a Day :
for other
Faintin
Fundam
ment, an
warm Dr
Feet G
common
lam cum
same be
—Hold
with you
a good
Hands i
But for
Plaister
are afra
Face
Gang
warm
as one
Grip
small
having
put it
en a li
Rest a
&c.
Gid
ful of
gether
Gu
canno
wash
Hone
He
Betox

Flux.—Take a Spoonful of the Powder of Cinnamon, Half so much of beaten Acorns and their Cups, with some Loaf Sugar, and eat them Half an Hour before Dinner : Or boil an Ounce and an Half of whole Cinnamon, and a Quarter of a Pound of Loaf Sugar, in a Pint of Milk and a Quart of fair Water Half an Hour ; drink the Liquor all in a Day : It is a Cordial ; the Cinnamon may be used again for other Uses.

Fainting.—Drink the Tea or Dec. of Mint.

Fundament fallen out.—Anoint with Marsh Mallows Ointment, and scatter on it the Powder of Mastick, and with a warm Dish-clout strive to put up the Gut.

Feet Galled, or to prevent their Galling—Rub them with common Soap. *If Galled.*—Lay on a Plaister of *Diachylon cum Gummi*. *If an hard Bunch on the Foot.*—Let the same be on for some Months. *If they itch much in Winter.*—Hold the itching Place to the Fire a Quarter of an Hour with your Hose on ; or bathe them with the Water wherein a good Quantity of Allum is boil'd ; do so to kib'd or swell'd Hands in the Winter, or that sweat too much in Summer : But for Chilblains on Hands or Feet, the Skin being off, one Plaister of Burgamy Pitch cures, which some foolish People are afraid to use, because it draws.

Face scabby.—Nutritum spread on thin Paper.

Gangreen'd Sore, or venomous Biting.—Hold the Place in warm Milk, applying the Lights of new kill'd Calves, and as one grows black, lay on more fresh Lights.

Gripping in the Guts.—Take a Quartern of Brandy, slice a small Nutmeg into it, flame it a little over the Fire ; then having beaten the Yolk of an Egg with Water and Sugar, put it to the other, whilst it is over the Fire ; stir it to thicken a little ; drink it all at going to Bed ; it is a Cordial, gives Rest and Sleep to the Sick, and is good against Chólick Pains, &c.

Giddiness in the Head.—Half roast an Egg, with a Spoonful of slit Pepper, and eat it ; do so three Mornings together.

Gum sore.—Hold Allum in your Mouth often, if you cannot chew Tobacco ; but they would not be sore if you wash'd your Mouth after every Meal : For a Child, use Honey of Roses, or Honey and Allum mix'd.

Head Ach.—Drink often the Tea of Rue, Sage, or Betony.

Heart.

Heart-Burn.—Put a Spoonful of Chalk in your Mouth, and wash it down with skim Milk.

Faundice.—Drink the Juice of Celadine in Beer often.

Itch.—One Pound of new Lime steep'd 24 Hours in a Gallon of Spring Water, pour the Clear into a Kettle, and set a Pot with two Ounces of Quicksilver in it to boil Half an Hour; wet all the itching Places therewith; but a private itching Place, wet it every Morning with fasting Spittle, and take the Purge.

King's Evil.—Take Liquorice, sweet Fennel Seeds, and Aniseeds, of each two Ounces beaten, white Nettles and their Roots, of each an Handful, boil all these in a Gallon of Spring Water till Half is wasted; strain it, and when it is well settled, pour the clearest into a Bottle; put to it Honey of Roses two Ounces, Syrup of Violets, and brown Sugar Candy, of each one Ounce, beaten small, stir them all together in a Glass Bottle, and shake it well every Time you use it: Drink some of it often upon an empty Stomach, for three Months or more; but for a Child of two, or three, or four Years old, give three or four Spoonfuls first and last, fasting an Hour after; the Plaister of *Diacbilum cum Gummi* is good; but that made of Figwort Roots is best to dissolve hard Swellings.

Lice in the Hair of Men or Beasts.—Mix the Powder of Savesacre with Water or Butter; it is also call'd Louse-Powder.

Melancholy.—Eat often of Cream of Tartar mix'd with Honey or Treacle.

Madness.—Hold the Person under Water until almost drown'd, put him into Bed in a dark Room, and his Diet only Milk Pottage, half Water.

Piles.—Drink often of the Tea of Yarrow, eat mostly Bread and Butter, sit over the Fume of Olibanum, Myrrh, and Frankincense, or hot Coals.

Poison newly taken.—Drink Sallad Oil mix'd with Cream of Tartar, and put a Feather in your Throat to vomit.

Pain coming suddenly.—Lay on a warm Piece of Tile wrapt in brown Paper. *If a Pleurisy*.—Chafe in Ointment of Marsh Mallows, mix'd with a little liquid Laudanum, and sweat in Bed: Or take the Decoction of Camomile.

A Purge safe for all.—Take Cream of Tartar one Ounce, Jalap and Brimstone of each a Quarter of an Ounce, let the Jalap first be beaten into fine Powder, before

fore you beat them together, that they may be well mix'd together in a Mortar ; but if you are hard to work upon, put of Jallop two Drachms more.

Poultice.—Boil White Bread Crums in Spring Water to a right Thickness, then stir it into a little Butter or Suet, apply it, new-made, twice a Day, to Sores, Pains, Strains, broken Bones, &c. Some cure sore Legs with it : Besides this, dip a Flannel in hot Soap-Suds, and bathe the Leg often, drinking the Tea or Dec. of Centaury constantly : Great Cures have been done with this.

Melilot Plaister made in June.—Take Melilot, Pimpernel, and Scabious, of each two Handfuls ; beat them small, then beat them in a Mortar with two Pounds of dry'd Hog's Seam, so let it stand in the hot Sun-shine seven or eight Days ; then melt it and strain it well, and add as many more fresh Herbs, and set it in the Sun as before ; and melt and strain it again ; then boil it till the Juice is consumed ; then take it off the Fire, and put to it beaten Resin, Bees-Wax, and Venice Turpentine, of each one Ounce, and when cold, a Drachm of Musk ; keep it in a Pot, or in Rolls.

For hollow Ulcers.—Melt some Melilot, and dip a Tent made of Linen, or Tow, according to the Hollowness of the Ulcers, first rolling the Tent in burnt Allum, as you see Cause ; remembring to make the Tent less and less, as the Fistula lessens, and lay a Plaister on the same ; and if the Sore be in the Leg, lay all over a large Paper, spread with Nutritum, to drive back Humours from flowing down to the Sore : And if your Body be foul, take the Purge ; always remember to purge well after you be cured of any Ditemper.

Small-Pox.—Being warm in Bed, drink mull'd Ale with Marigold Flowers, and sweat a little to bring out the Pox, and keep them up ; take Brimstone and Treacle. *In a sickly Time.*—Drink the Tea of Rue before you go abroad.

Rickets.—Boil 6 House Snails with their Shells, in a Pint of new Milk, till one half is wasted, give the Milk to the Child for Breakfast, and at Four in the Afternoon, mince the Snails, and heat them, and let them eat it as other Meat ; then anoint his Joints with the Oil that follows, *viz.* Bake black Snails and Camomile with Town-Bread, and the Oil will swim at the Top.

Running of Reins.—Take fine Bole, sealed Earth, and

Q

Dragon's

Dragon's Blood, of each one Ounce, Conserve of Rose three Ounces, mixed, and take the Quantity of a Nutmeg first and last. Drink no strong Drink, nor eat sugar'd Meats.

Spleen.—Fill a Glass Bottle with the small Twigs of Tamarisks, then, with White Wine, drink some at Morning.

Swelling that comes suddenly.—Boil Smallage, Mallows and Camomile, in Milk and Water, till they are tender, moisten it with a little Seam or Butter, lay it on twice a Day, or use the Poultrice.



An Exact LIST of all the
FIX'D FAIRS
 IN
ENGLAND and WALES,

According to the Order of the Days on which they are held throughout the Year.

Note, The Figures on the Left-hand denote the Days of the respective Months.

The contracted Words plac'd after the Towns, &c. denote the several Counties where, such Places are.

The Market-Towns, as they first occur, are distinguished by the initial Letters of the Days of the Week on which their Markets are held; where M stands for Monday, T for Tuesday, W for Wednesday, Th for Thursday, F for Friday, and S for Saturday.

The Cities are distinguished by being put in Capitals.

The true Alphabetical Order, as far as it goes, is observed under each Day.

JANUARY

- 1 C Halbury, Oxf.
 Droitwich, Worc.
 Hornby, Lanc.
 Laycock, Wilts.
 Penryn, Cornw.
 Saltwich, Worc.

- 2 Landilovawr, Cornw.
 9 CANTERBURY, Kent
 Cockhill, Somers.
 Royston, Heref.
 SALISBURY, Wilts.

- 14 Llanibithew
 16 Hickford, Lanc.



- 17 SALISBURY, Wilts. TS
 Tavistock, Devon. S
 18 Langinny, Monm.
 24 Derby, WFS

- 29 Grampound, Cornw. S
FEBRUARY.

- 4 Barkston, Yorksh.
 5 Bōdmin, Cornw. S
 BRISTOL, Somers. WThS
 Churchingford, Devon.
 Gravesend, Kent, WS
 North Allerton, Yorksh. W
 Ridbury

- 11 Landysfield

- 11 Landyffiel
12 Bromley, Lanc.
13 Armington, Devon.
Ashbourn, Derb. S.
Beaconsfield, Bucks. Th
Bickleworth, Bucks
Bridgenorth, Shrop. S
Bromley, Kent, Th
Bromley, Staff. T
Bugworth, Chesh.
Cray, Kent, W.
Devizes, Wilts, Th.
Dorchester, S
East-Lowe, Cornw. S
Evesham, Worc. M
Farringdon, Berks, T
Godalming, Surry, S
Hambleton, Hampsh.
Hindon, Wilts, Th
Leominster, Heref. F
Lifton, Devon. S
Lime, Dorsetsh. F.
Linn, Norfolk, Th S
Maidstone, Kent, Th
Maldon, Yorksh. S
Reading, Berks, S
Saltash, Cornw. S
14 Axbridge, Somersf. Th
BATH, Somersf. W S
Blaise, Cornw.
Boxgrove
Frampton on Severn, Th

- 19 Tregaron, Card. Th.
20 Landaff, Glam.
25 Ashbittel, Somerset.
Feverham, Kent, W S
Oulney, Bucks, M
Plympton, Devon, S

M A R C H

- 4 Chipping-Norton, Oxf. W
5 Baldock, Hertf. Th
6 Blandford, Dorsetsh. S
Bourne, Linc. S.
Corham, Wilts
Frome, Somersf. W
Henly upon Thames, Oxf. Th
Higham-Ferris, Northamp. S
East-Isley, Berks, W
Tewksbury, Glouc. W S
Uppingham, Rut. W
Walden, Essex, S
Whitland
8 Stafford, S
10 Chesterfield, Derb. S

- 12 Culliford, Devon.
Langevellesh, Glam.
Madrim
13 Langadock, Carm. Th
14 Brimwelbracks, Norfolk
Sevenoke, Kent, S
15 Bedford, T S
Oakham, Rutl. S
16 Pensance, Cornw. Th
17 Harif
18 Workfop, Notting. W
19 Tregaron, Card.
21 Downes, Devon
23 Alesham, Norfolk, S
Bodmin, Cornw.
Stockport, Chesh. S
Sudbury, Suff. S
Wrexham, Denb. M Th
Woburn, Bedf. F
24 Bedwin, Wilts
Mountbowin, Cornw.
Wye, Kent, Th
28 Bakewell, Derb. M
Malmesbury, Wilts S
Patrington, Yorksh. S
29 Stourbridge, Worc. S
30 Cobham, Surry
31 Alesbury, Bucks, S
DURHAM, S
Newbridge, Oxf.
Northmore

A P R I L

- 2 Tocester, Northamp. T
4 Grimsen, Monm.
Llanerchemith
Northfleet, Kent
5 Ashwell, Hertf.
Axbridge, Somersf.
Bishops-Lidiard, Somersf.
Bridport, Dorsetsh. S
Caerfilly, Glam. Th
Cardigan, S
Chagford, Devon.
Clack, Wilts
Croscumb, Somersf.
GLOUCESTER, W S
Great Chart, Glouc.
Huntington, S
Lamberhurst, Kent
Maldon, Essex, S
Malpas, Chesh. M
Midhurst, Suffex, Th
Montgomery, Th

- | | |
|-------------------------------|----------------------------|
| 5 Newcastle upon Tyne, T S | 2 Newport-Pagnel, Bucks, S |
| Northampton, W F S | Redruth, Cornw. |
| Norhill | 3 Stafford |
| Oulney, Bucks. | Westram, Kent, W |
| Plympton, Devon. | 4 Ampthill, Bedf. Th |
| Probus, Cornw. | Arden, Norfolk. |
| SALISBURY, Wilts. | Beefy, Glouc. |
| Sea-saltre, Kent | Bewdley, Worc. S. |
| Southick, Hampsh. | Bilston |
| St. Alban's, Hertf. W S | Bridstock |
| St. John's, Worc. | Bury, Lanc. Th |
| Wadley, Berks. | Castlecomb, Wilts |
| Walden, Essex | Chagford, Devon. |
| Watlington, Oxf. S | Charing, Kent |
| Wickware, Glouc. M | Chedder, Sommerf. |
| Wigburn | CHICHESTER, Suffex, W S |
| Wigmore, Monm. | Cliffe, Northamp. T |
| Woodstock, Oxf. T | Cowbridge, Glam. T |
| 7 Atherston, Warw. T | Frampton, Dorsetsh. |
| Derby | Gravesend, Kent |
| 9 Whitland | Great Torrington, Devon. S |
| 13 Epping, Essex, Th F | Guildford, Surry, S |
| Hitching, Hertf. T | Haly, Berks |
| Leek, Staff. W | Harbin, Norfolk |
| Northfleet, Kent | Harlow-bush, Hertf. |
| Rochford, Essex. Th | Hemingham, Essex |
| 15 Bewley, Hampsh. | Hilborough |
| 16 Wareham, Dorsetsh. | Ipswich, Suff. W F S |
| 18 Clare, Suff. F | Kirton, Linc. S |
| Derby | Longner |
| 19 Fenny-Stratford, Bucks | Luton, Bedf. M |
| 20 Billingsworth | Manhemot, Cornw. |
| Cobham, Surry | Modbury, Devon. Th |
| 21 Sheepwash, Devon. | Northampton |
| 22 Aberforth, Yorksh. W | Nutley, Suffex |
| Pontypole, Monm. S | Overton, Hampsh. |
| Warminster, Wilts. S | Sapsan, Hertf. |
| 23 Downton, Wilts. F | Sawbridgeworth, Hertf. |
| 24 Earleton, Heref. | Spasfer, Hertf. |
| Englesfield, Suffex | St. Pombs, Cornw. |
| Orleton, Westm. | Tamworth, Staff. S |
| 25 Acton, Glouc. | Wilton, Wilts, W. |
| 26 Kettering, Northamp. F | Wortham, Kent, T |
| 27 East Grinstead, Suffex, Th | Wotton-Basset, Wilts, Th |
| Holdzary, Devon. | 6 Abingdon, Berks, M F |
| 28 Malmesbury, Wilts. | Axminster, Devon. S |
| 30 Bilborough, Notting. | Axmouthe, Devon. |
| Bruton, Somers. S | Bourn, Linc. |
| Gainborough, Linc. T. | Bradridge, Devon. |
| St. Ives, Cornw. W S | Bracknel, Berks. |
| M A R | Buckingham, S |
| 1 Kellington, Cornw. S | Calne, Wilts, T |
| Kemring, Northamp. | Chaly, Devon. |
| Stonehouse, Glouc. | |

6 Chipping-Norton, Oxf.
 Cliffe, Suffex
 Cotebrook, Bucks, T
 Dunmow, Essex, S
 Dursley, Glouc. Th
 Halsted, Essex, S
 Iringo, Bucks, F
 Maidenbradly, Wilts.
 Mountecut, Somers.
 Pensford, Somers. T
 Southampton, T Th S
 Stalbridge, Dorsetsh.
 Stockunderham, Somers.
 Stokegomer, Somers.
 Swaley
 Tangle, Hampsh.
 Tavistock, Devon.
 Tenbury, Worc. T
 Tregahethaw, Cornw.
 Tregony, Cornw. S
 Uttoxeter, Staff. W
 Wallingford, Berks, T F
 West Lowe, Cornw.
 Winchcomb, Glouc. S
 7 Aldborough, Suff. S
 Tenterden, Kent, F
 8 Bosworth, Leic. W
 Churchingsford, Devon.
 Okeham, Rutl.
 Philipsnorton, Somers. Th
 9 Soham, Camb.
 10 Beverley, Yorksh. W S
 Kerton, York.
 Stanes, Middl. F
 11 Andover, Hampsh. S
 Blackborn, Lanc. M
 Blackheath, Kent
 Blackney, Glouc.
 Brickhill, Bucks
 Caerlion, Monm. Th
 Castle Cary, Somers. S
 Chelmsford, Essex, F
 Columpton, Devon. S
 Congleton, Chesh. S
 Corfe-Castle, Dorsetsh. S
 Crickhowel, Breck. Th
 Enfield, Middl. S
 Evershot, Dorsetsh. Th
 Ewel, Surry
 Folkingham, Linc. Th
 Fowey, Cornw. S
 Hannye, Essex
 Harwich, Essex, T

12 Haveril, Essex, W
 Hertford, S
 Kintmar
 Lagborn, Berks, F
 Lantriffent, Glam. F
 Leicester, W F S
 Leighton, Bedf. T
 Lexfield, Suffolk
 Liddbury, Heref. T
 Limington, Hampsh. S
 LITCHFIELD, Staff. T F
 Louth, Linc. W S
 Lynfield, Suffolk
 Maidstone, Kent
 Milbrook, Cornw.
 North Petberton
 Oswestry, Shrop. M
 Pembridge, Somers. T
 Penryn, Cornw. W F S
 Philipsnorton, Somers.
 Sherton, Wilts
 Stanstead, Hertf.
 Stocknail
 Stow in the Wold, Glouc. Th
 Stratford on Avon, Th
 Stroud-Water, Glouc. F
 St. Stephen, Cornw.
 Sturminster, Dorsetsh. Th
 Thetford, Norf. S
 Totness, Devon. S
 Tuxford in the Clay, M
 Usk, Monm. F
 Warbridge, Cornw.
 Warwick, S.
 Wendover, Bucks, Th
 Wiscomb, Somers.
 13 Bramyard, Heref. M
 Chapel-heath, Glam.
 Graies, Essex, Th
 Lemster, Heref.
 Lime, Dorsetsh.
 Myden, Glam.
 Reading, Berks
 Wirksworth, Derb. T
 14 Abergavenny, Monm. T
 Arundel, Suffex, W S
 Ashborn-Peak, Derb.
 Backington, Devon.
 Bala, Merion. S.
 Berkley, Glouc. W
 Brent, Devon. S
 Broadcliff, Devon.
 Bromsgrove, Worc. T

- | | |
|---|---|
| <p>14 Chard, Somers. M
 Chertsey, Surry. W
 Church-Stretton, Shrop. Th
 Clifton, Bedf.
 Cowbridge, Glam.
 Crouch, Essex
 Denbigh, W
 Derris, Glouc.
 Elstow, Bedf.
 Hemingham, Essex
 Heytsbury, Wilts
 High Beckington, Devon
 Holway, Somers.
 Huthersfield, Yorksh.
 Machynleth, Mont. M
 Meethyr
 Moun-ton
 Nuneaton, Warw. S
 Oakhampton, Devon, S
 OXFORD, W S
 Pulhely, Carn. W
 Radfdale, Lanc.
 Ramsbury, Wilts
 Stafford
 Stowgussy, Somers.
 Tewksbury, Glouc.
 Tidde-swall, Derb. W
 Tichfield, Hampsh.
 Tregony, Cornw.
 Waltham Abby, Essex, T
 WELLS, Somers. W S
 Witheridge, Devon.
 Woodbridge, Suff. W.
 Woolbridge, Dorsetsh.</p> <p>15 Beverley, Yorksh.
 Chapel in Frith, Derb.
 Chatham, Kent
 Chesterfield, Derb.
 Hay, Breck. M
 Rippon, Yorksh. Th
 Rowland-castle, Berks.</p> <p>16 Ashford, Kent, S</p> <p>17 Amesbury, Wilts
 Chippingham, Wilts, S.
 Knighton, Radn. Th
 Mere, Wilts</p> <p>18 BATH, Somers.
 Hanslop, Bucks
 Newton, Lanc.
 Thunderly</p> <p>19 Stratton, Cornw. T.
 Wemerly, Cornw.</p> <p>20 Tockington, Glouc.
 Wickham, Hampsh.</p> | <p>21 Combslock, Deven
 Fringe, Norfolk
 Hatherley, Devon, F
 St. Tiddy</p> <p>22 Applesham, Hampsh.
 Dunstable, Bedf. W
 Greenstreet</p> <p>23 Bagborough, Somers.
 Thorock Graies, Essex
 YORK, T Th F S</p> <p>24 Albrighton, Shropsh.
 Bale
 Brickwell
 Merin</p> <p>25 Dagenham, Essex
 Fordsham, Essex</p> <p>26 Camelford, Cornw. F
 Langaranny, Card.
 Welshpole, Mont. M</p> <p>29 Tallowdown, Dorsetsh.</p> <p>30 HEREFORD, W F S
 Mayfield
 Odehill
 ROCHESTER, Kent, W F
 Steyning, Suffex, W F
 J U N E</p> <p>2 Dorchester</p> <p>4 Somerton, Somers. M
 Malmesbury, Wilts</p> <p>6 Lenham, Kent, T</p> <p>7 Montgomery</p> <p>8 St. Germans, Cornw.</p> <p>9 Cranbrook, Kent, S.</p> <p>10 Pershore, Worc. T</p> <p>12 Chapel, Derb.</p> <p>14 Alesbury, Bucks</p> <p>15 Ryston, Somers.</p> <p>16 Milbourne-Port, Somers.</p> <p>17 Milton, Kent, S</p> <p>18 Worksen</p> <p>20 Abingdon, Berks
 Maidstone, Kent</p> <p>21 Highbeach, Essex</p> <p>22 Amesbury, Wilts
 Appledore, Kent
 Axbridge, Somers.
 Boroubridge, Yorksh. S
 Bremel, Norf.
 Chippenham, Wilts
 Chudleigh, Devonsh. S
 Grampound, Cornw.
 Hatherly, Devon
 Holt, Norf. S</p> |
|---|---|

1 Kinwilgate, Carm.
 Landilovawr, Carm. T S
 Llanibithew
 Lanwist
 Lodbury, Heref.
 Macclesfield, Chesh. M.
 Market-Jew, Cornw. Th
 Newborough, Angl. T
 Newcastle in Emalin
 Newnham, Glouc. F
 Newport Pagnel, Bucks
 Ockingham, Berks. T
 Porlock, Somers.
 Selby, Yorksh. M
 Shipston upon Stower, F
 Stavord, Somers.
 Stockland, Dorsetsh.
 Swansey, Glam. W S
 Tewkesbury, Glouc.
 Warbridge, Cornw.
 Wellington, Shrop. Th
 23 Manhemot, Cornw.
 Pontefract, Yorksh. S
 24 Newtown, Montg. T
 25 Bangor, Carn. W.
 26 Perthore, Wore.
 27 Built, Breck. M S
 Melcome-Regis, Dorsetsh. T F
 Newport-Keams
 28 Caerwigs, T
 Hadstock
 Hallaton, Leic. Th
 Higham-ferris, Northamp.
 Lanvilling, Montg. Th
 Molfon, Hampsh.
 Precot, Lanc. T.
 Queen's Cammel, Somers.
 Strawgreen
 Taunton, Somers. W S
 Yeovil, Somers. F
 30 Bridgeneth, Shrop.
 Cowyard, Glouc.
 Fairford, Glouc. Th
 31 HEREFORD
 Hith, Kent, S
 J U L Y
 2 Coln, Lanc. W.
 Yfradmerick
 3 Dereham, Norf. E
 Downham, Norf. S.
 Northleech, Glouc. W
 Shrewsbury, Shrop. W Th S
 St. Alban's, Hertf.
 4 Armington, Devon.

Castle Ebichen
 5 Alresford, Hamp. Th
 Awkingborough, Linc.
 Axminster, Devon.
 Barnet, Hertf. M
 Barnwel, Camb.
 Bedal, Yorksh. T
 Bedford
 Beverley, Yorksh.
 Billington, Kent
 Bishop's Castle, Shrop. F
 Bosworth, Leic.
 Boughton Green, Northamp.
 Bradfield, Essex, Th.
 Brecknock, W S
 Bridgewater, Somers. Th
 Bromsgrove, Wore.
 Burford, Oxf. S
 CHESTER, W S
 Colchester, Essex, S
 Cowbridge, Glam.
 Cranbrook, Kent
 Croydon, Surry, S
 Derby
 Devizes, Wilts.
 Dorchester
 Earling, Hamp.
 Farnham, Surry, Th
 GLOUCESTER
 Halifax, Yorksh. Th
 Hartstone, Norf.
 Hertford
 Horsham, Sussex, S
 Hurst
 Kirkham, Lanc. T
 Knotsford, Chesh. S
 Kington, Warw. T
 Lancaster, S
 Launceston, Cornw. S
 Leicester
 LINCOLN, F
 Ludlow, Shrop. M
 Newbury, Berks Th
 Newton-bushel, Devoa.
 Orford, Suff, M
 Pemsey
 PETERBOROUGH,
 Northamp. S
 Plint, Cornw.
 Plympton, Devon.
 Pontipole, Monm. S
 Preston, Lanc. W F S
 Probus, Cornw.
 Reading, Berks.

- 5 Rumford, Essex, T W
 Silverton, Devon.
 Shaftsbury, Dorset. S
 Sodbury, Glouc. Th
 St. Ann's
 Stritstock
 South-Petherton, Somers. Th
 Tangley, Hampsh.
 Torrington, Devon.
 Tunbridge, Kent, F
 Wakefield, Yorksh. Th F
 Wallingford, Berks
 Wareham, Dorsetsh.
 Warminster, Wilts, S
 Warwick
 WELLS, Somers.
 Wenlock, Shrop. M
 Windsor, Berks, S
 Wolverhampton, Staff. W
 Woodhurst, Hunt.
 YORK
 6 Bungey, Suff. Th
 7 Buckingham
 Northop
 8 Burton upon Trent, Th
 Folkeston, Kent, Th
 Lanrogarn, Angl.
 Machynleth, Montg.
 9 Royston, Hertf. W
 St. Bala, Merion.
 St. Pembs, Cornw.
 10 Abbotbury, Dorsetsh. Th
 Ashwell, Hertf.
 Aylsford, Dorsetsh.
 BATH, Somers.
 Berington, Hertf.
 Berkhamsted, Hertf. M
 Bibalance
 Blandford, Dorsetsh.
 Bolton, Lanc. M
 Bookford, Devon.
 Bromley
 Cardiffe, Glam. W S
 Camborn, Cornw.
 Charmouth, Dorsetsh.
 Dulverton, Somers. S
 Fareham, Hampsh. Th
 Gorgan, Lanc.
 Hadderfield, Suffex
 Hartlerow, Berks
 Hodsdon, Hertf. Th
 Holdworth
 Heldzary, Devon.
 Hooksnorton, Oxf.
 10 Horndon, Essex
 Huntsfield, Somers.
 Iver, Bucks
 Lamorgan
 Langport, Somers. S
 Larick, Cornw.
 Lemster, Heref.
 Leftwithiel, Cornw. F
 Lower Knotsford, Chesh.
 Mansfield, Notting. Th
 Marlborough, Wilts, S
 Mountserrel, Leic. M
 Oulney, Bucks
 Petersfield, Hampsh. S
 Pont-Stephen
 Radnage, Bucks
 Ringwood, Hampsh. W
 Sevenoke, Kent
 Southam, Warw. M Th
 Stafford
 Starstrange, Suff.
 Stebbing, Essex
 Stockbridge, Hampsh.
 Stockworth, Linc.
 Stoken Church, Oxf.
 Stow, Suff. Th
 Sudbury, Suff.
 Thorock Graies, Essex
 Tring, Hertf. F
 Upton on Severn, Th
 Uscomb, Devon.
 Wem, Shropsh. Th
 Winborn, Dorsetsh. F
 Winterborn, Glouc.
 Winteridge, Devon.
 Witney, Oxf. Th
 12 Carshalton, Surry
 Congleton, Chesh.
 Portsmouth, Hampsh. Th S
 13 Ashton under Line, Lanc.
 Huntington
 Ickleton, Camb.
 Neath, Glam. S
 Rickmansworth, Hertf. S
 Smeath, Kent
 Swansey, Glam.
 Wem, Shrop.
 Wickware, Glouc. M
 Woborn, Bedf.
 Woodstock, Oxf.
 14 Hadderston
 15 Chesterfield, Derb.
 16 Burton

- 16 Burton upon Trent
Woodland, Dorsetsh.
- 17 Audley End
Haveril, Essex
Lanibithew
Lanydlos, Montg. S
- 18 Albrighton, Shrop.
Amsworth, Hampsh.
Brentwood, Essex, Th
Camelford, Cornw.
CANTERBURY, Kent, W S
Carington
Castlemain
Castle Town, Heref.
Chapel in Frith, Derb.
Chippingnorton, Oxf.
Cirencester, Glouc. M F
Denbigh
Emlin
Haverfordwest, Pemb. T S
Laycock, Wilts
Newport, Shrop, S
Odiam, Hampsh. S
Okehampton, Devon.
Overton, Hampsh.
Penryn, Cornw.
Richmond, Yorksh. S
Royston, Hertf.
Shefford, Bedf. F
Sherborn, Dorsetsh. Th S
Southbovey, Devon.
Stockton, Durham, S
Sweaton
Taunton, Somersf.
Tenbury, Worc.
Thresnevimick
Uppingham, Rutl.
Wantage, Berks, S
Weald
Whatley, Somersf.
- 20 Helston, Cornw. S
Ingatston, Essex
- 21 Foulness
- 22 Lid, Kent, Th
- 24 Fairnhay
- 26 Chiswick, Middl.
Cullisford, Devon.
Grimstead, Suffex
Pinchback
Porchdown, Hampsh.
Sherborn, Dorsetsh.
Twisford, Berks
- 27 Evershot, Dorsetsh.
Headon, Yorksh. S
- 27 Milson, Wilts.
- 28 Built, Breck.
Knelms
Lanvilling, Montg.
Leek, Staff.
Stevenedge, Hertf. F
Winchcomb, Glouc. S
- 30 Caerfilly, Glam.
Linton, Camb. Th
- 31 Alfreton, Derb. M
Barkway, Hertf. S
Barton, Linc. M
Bartontracy, Hampsh.
Betley, Staff. T
Bolton, Lanc.
Bowling
Caerlion, Monm.
Catesby
Chilmark, Wilts
Chimmoek
Kingsbridge, Devon. S^d
Malden, Essex
Marlborough, Wilts
Midhurst, Suffex
Moreton, Devon. S
Norton, Wilts
Pocklington, Yorksh. S
Rofs, Heref. Th
St. Margaret's, Kent
St. Stephen, Cornw.
Tenby, Pemb. W S
Uxbridge, Middl. Th
- AUGUST
- 1 Bicklesworth, Bucks
Billericay, Essex, T
Bridgnorth, Shrop.
Broughton
Calne, Wilts
Clethero, Lanc. S
Morpeth, Northumb. W
- 2 Allington, Dorsetsh.
Auburn, Wilts, T
Barnard Castle, Northumb. W
Battlefield, Shrop.
Broughton in Furnace
Chimleigh, Devon. Th
Colchester, Essex
Cromas, Oxf.
Dartford, Kent S
ELY, Camb. S
EXETER, Devon, W F
Goldzinnay
Goudhurst, Kent, W
Honyton, Devon. S

- 2 Ilchester, Somers.
 Kefwick, Cumb. S
 Kidwelly, Carm. T
 Kimbolton, Hunt. F
 Kingston, Surry, S
 Kington, Heref. W
 Landgridge, Somers.
 Liverpool, Lanc. S.
 Longford, Devon.
 Lowth, Linc.
 Ludgershal, Wilts.
 Lymppham, Somers.
 Maidenhead, Berks, W
 Maudlin-hill, Yorksh.
 Maudlin-hill, Hamp.
 Newark, Notting. W
 Northwich, Chesh. E
 Ponterley
 Rocking, Kent
 Stockbury
 Stony Stratford, Bucks. S
 Tetbury, Glouc. W
 Wedmore, Somers.
WINCHESTER, Hamp. WS.
 Witheral, Yorksh.
 Yadeland
 Yarmouth, Hampsh.
 Yarum, Yorksh. Th
- 3 Carnarvon, S
 Cheston
 Daventry, Northamp. W
 Redruth, Cornw.
- 4 Wefno, Essex
- 5 Abingdon, Berks
 Aldergain
 Altrincham, Chesh. T
 Athwel, Hertf.
 Baldock, Hertf.
 Berkhamstead, Hertf.
 Bicester, Oxf. E
 Bilson
 Bilstower
 Bos-castle, Cornw.
 Boston, Linc. WS
 Bridgtown, Devon.
BRISTOL, Somers.
 Broadoak
 Bromley, Kent
 Bromely, Staff.
 Breamsgrove, Worc.
 Buntingford, Hertf.
 Campden, Glouc. W.
 Casden
 Gastle-Town, Heref.
- 5 Catsotham
 Cheltenham, Glouc. Th
 Chilholm,
 Derby
 Doncaster, Yorksh. S.
 Dorchester
 Dover, Kent, WS
 Dudley, Worc. S
 Epsom, Surry
 Erith, Kent
 Garret, Surry
 Hatfield, Essex, S
 Hatfield, Hertf. Th
 Hemmingham, Essex
 Holthil, Dorsetsh.
 Janbarwick, Wilts
 Ipswich, Suff.
 Kingston, Berks
 Kingston, Lisse
 Landervigan
 Machynleth, Montg:
 Malmesbury, Wilts
 Malpas, Chesh.
 Milverton, Somers.
 Ravensglass, Cumb. S
 Reading, Berks
 Saltash, Cornw.
 Seale, Glouc.
 Shesnal, Shrop. F
 Shirking, Middl.
 Stackpool
 Stamford, Linc. MF
 Staveisdale in the Wood, Devon.
 St. James's, Ipswich
 Stone, Staff. T
 Themble Green
 Thickham
 Thrapston, Northamp. T
 Tilbury, Essex
 Tregony, Cornw.
 Trowbridge, Wilts, S
 Walden, Essex, S
 Warrington, Lanc. W
 Wigmore, Monm.
- 6 Bewdley, Worc.
 Paddington, Middl.
 Rhaiadergwy, Radn. W
 Tanhil, Wilts
 Teptery, Essex
- 7 Falmouth, Cornw. Th
 Horsham, Suffex
- 8 Fairfax
 Fursut
- 9 Man-

Manhemot, Cornw.
Pontipole, Monm.
Stafford
Banbury, Oxf. Th
BATH
Bishops Waltham, Hamp.
Burford, Wilts
Caerfilly
Carmarthen, W S
Chepstow, Monm. S
Dunstable, Bedf.
Earlton, Hertf.
EXETER, Devon.
Faversham, Kent.
Flint
St. Germans, Cornw.
Grifman, Monm.
Hammock, Devon.
Hampstead, Middl.
Hay, Breck.
Highworth, Wilts, W
Hornsea, Yorksh.
Iver, Bucks
Lantriffent, Glam.
Larwin
Lidford, Somers.
Loughborough, Leic. Th
Malling, Kent, S
Markham Church, Cornw.
Mitcham, Surry
Newcastle-under-Line, M
Newent, Glouc. F
Newton, Lanc.
Northam Church
North-Curry, Somers. Th
PETERBOROUGH, North.
Plympton, Devon.
Rumney, Kent. Th
Selby, Yorksh.
Shrewsbury, Shrop.
Stoke Gomer, Somers.
Thaxted, Essex, F
Treganethaw, Cornw.
Warbridge, Cornw.
Witch, Camb. S
Yelland, Yorksh.
Yminith
YORK
Camberwell, Surry
Daventry, Northamp.
St. Deacon, Somers.
Linton
Thunderly, Essex

15 Tocester, Northamp.
Tottenham Court, Middl.
17 Bardney
20 Abelew
21 Alchurch, Worc.
Alton, Hampsh. S
Ashborn, Devon.
Bampton, Devon. S
Blackmore, Essex
Bodmin, Cornw.
Brentford, Middl. T
Chorleigh
Chudleigh, Devon.
Crowleigh, Lanc.
Deddington, Oxf. S
Different, Glam.
Differing Olliwick
Dinton, Oxf.
Doncaster, Yorksh.
Farnham, Dorsetsh.
Foreham
Frodesham, Chesh. W
Fulsea
Harleigh
Hawkhurst
Hilmerton, Wilts
Horncastle, Linc. S
Hungerford, Berks, W
Kellow
Kenwilgal
Kilgarren, Pemb. W
Kirtou, Devon.
Lansdown, Somers.
St. Lawrence, Cornw.
Lawrence Lidiard, Somers.
Lechlade, Glouc. T
Madbury, Devon.
Melton Mowbray, Leic. T
Marras
Martock, Somers.
Newborough
Oulney, Bucks
Peckham, Surry
Peddy, Somers.
Rugby, Warw. S
Sedelow, Yorksh.
Sheepwash, Devon.
Shelborn
Sherborn, Dorsetsh.
Stroud-water, Glouc.
Wakefield, Yorksh.
Walden, Essex
Waltham-Lawrence, Berks
21 War-

- 21 Warminster, Wilts
 Winslow, Bucks, Th
 22 Allchurch, Heref.
 23 Retford, Notting. S
 24 Bleagon, Somersf.
 St. Eades
 Tuxbury
 25 Caerfilly, Glam.
 26 St. Albans, Hertf.
 Bakewell, Derb.
 Bampton in the Bush, Oxf. W
 Bolton, Lanc.
 Cardigan
CARLISLE, Cumb. S
 Corby
 Cambridge, S
 Dryfield, Yorksh.
 Dunmow, Essex
 Eastbrint, Somersf.
 Eglewistate
 Ellesmere, Shrop. T
 Gisborough, Yorksh. M
 Goudhurst, Kent
 Hermitage, Dorsetsh.
 Hineckley, Leic. M
 Huntingdon
 Ilminster, Somersf. S
 Illsley, Berks
 Lelant, Cornw.
 Leskard, Cornw. S
 Luton, Bedf.
 Marlborough, Wilts
 St. Mary Ottery, Devon
 St. Mary's Parish, Glam.
 Morelidge, Somersf.
 Newin
 Newport, Monm. S
 Newport Moor
 Northampton
 Preston, Lanc.
 Rhaiadergwy, Radn.
 Rofs, Heref.
 Rumsfey, Hampsh.
 Stow, Linc.
 Swansey, Glam.
 Tenbury, Worc.
 Thornbury, Glouc. S
 Turbury, Cumb.
 Whitland
WORCESTER, W F S
 31 North Moor
S E P T E M B E R
 4 Aston, Middl.
 Aldborough, Suff.
 Ashby-de-la-Zouch, Leic. S
 4 Ashford, Kent
 Beaulley, Hampsh.
 Beggars-Bush, Middl.
 Bookfordlee, Devon
 Bridgestock
 Bromley Pagets
 Chaffin
 Chipping Norton, Oxf.
 Corsham, Wilts
 Crampborn
 Cranborn, Dorsetsh. W
 Crookhorn, Somersf. S
 Crowland, Linc. S
 Crowley, Glouc.
 Croyley
 Dover, Kent
 Farrington, Berks
 Fenningham, Suff.
 Frampton, Dorsetsh.
 Grimby, Linc. W
 Hetherly, Devon.
 Horewood
 Kidderminster, Worc. Th
 Larick, Cornw.
 Lemster, Heref.
 Lestwithiel, Cornw.
LONDON, Barthol. Fair.
 Mere, Wilts
 Monmouth, S
 Montgomery
 Namptwich, Chesh. S
 Newbury, Berks
 Northallerton, Yorksh.
 Northwich, Chesh.
NORWICH, Norf. W F S
OXFORD
 Sandy Chapel
 Silvertown, Devon.
 Stow-bridge, Dorsetsh.
 Sudbury, Suff.
 Tewkesbury, Glouc.
 Tuddington, Bedf. Th
 Watford, Hertf. T
 Watlington, Oxf. S
 5 Botley, Hampsh.
 Brecknock
 Kilnorton, Cornw.
 6 Camelford, Cornw.
 Ilchester, Somersf.
 9 Bromsgrove, Worc.
 Devizes, Wilts
 Fordingbridge, Hampsh.
 Halkon, Suff.

- 9 Harlow-Bush, Essex
 Helston, Cornw.
 Ockingham, Berks
 Ormskirk, Lanc. T
 Peverel, Devon.
 Sandford-Peverel, Devon.
 St. John's Bridge, Glouc.
 Sturbridge, Worc.
 Tavistock, Devon.
 Welshpole, Montg.
 Weston-zealand, Somersf.
 10 Uscum, Devon.
 11 Taller-downs, Dorsetsh.
 Wareham, Dorsetsh.
 12 Chapel Silvas
 Cranbrook, Kent
 Downderry-hill
 Farnborough, Kent
 St. Giles's near Winchester
 Gillingham, Dorsetsh.
 Kellington, Cornw.
 Kilmanton, Devon.
 Kirton, Devon.
 Neath, Glam.
 Tregony, Cornw.
 Whitehaven, Cumb. Th.
 Wilton, Wilts, W
 13 Abington, Berks.
 Acton, Glouc.
 Epping, Essex
 14 St. Tiddy, Cornw.
 Winborn, Dorsetsh.
 15 Oakham, Rutl.
 17 Probus, Cornw.
 18 Nethstow, Somersf.
 Ware, Hertf. T
 Woodbury-hill, Dorsetsh.
 19 Barnstaple, Devon. F
 Beaumaris, Angl. W S.
 Bemister, Dorsetsh. Th.
 Bishops Lidard, Somersf.
 Blackburn, Lanc.
 Brerewood, Staff. T
 Bruton, Somersf.
 Buckland, Somersf.
 Bury, Lanc.
 Calston, Chesh.
 Cardiffe, Glam.
 Cardigan
 Chatham, Kent
 Clack, Wilts
 Danebury, Devon.
 Dilton-Marsh, Wilts.

- 19 Drayton, Shrop. W
 Edge-mead, Somersf.
 Gilborn
 Gisborough, Yorksh.
 Glastenbury, Somersf. T
 Haulton, Chesh.
 Hertford
 Huntingdon
 Landyffel
 Meriwick, Cornw.
 Northampton
 Panfwick, Glouc. T
 Partney
 Prellili
 Reculver, Kent
 Rockingham, Northamp. Th.
 Smeath
 Snide
 Southwark, Surry
 Spalding, Linc. T
 Steeple-Ashton, Wilts
 St. Mary, Somersf.
 Stratford on Avon, Warw.
 Stretton-Church, Shrop.
 Sturbride, Camb.
 Swindon, Wilts, M
 Tenby, Pemb.
 Therston, Warw.
 Tuxford, Notting.
 Uttoxeter, Staff.
 Wakefield, Yorksh.
 Waltham
 Wandsworth, Surry
 Westerly
 Westmear
 Whitland
 Wolpit, Suff.
 Woold
 WORCESTER
 Wotton, Somersf.
 20 Wrinton, Somersf. T
 21 Basing-downs, Hampsh.
 Evesham, Worc.
 Fowey, Cornw.
 23 Enfield, Middl.
 Stow-gussy, Somersf.
 24 Horril, Hampsh.
 Kinton, Heref. T
 Ledwyn
 Newton, Lanc.
 Vahley
 Woking
 25 Abergavenny, Monm.

- 25 Baberry
 Barley, Kent
 Burford, Oxf.
 Chesterfield, Derb.
 Camstury, Somers.
 Cowbridge, Glam.
 Derris, Glouc.
 Hartland, Devon. S
 Heytsbury, Wilts
 Highdown, Suff.
 High Wickham, Bucks, F
 Moncton
 Newborough
 Newcastle in Emlyn
 Newport
 Oretton
 Penhall, Cornw.
 Ramsbury, Wilts
 Rhaiadergwy, Radn.
 Richmond
 Rippon, Yorksh.
 Ross, Heref.
 Shroghton, Dorsetsh.
 St. Stephen, Cornw.
 Waltham Abby, Essex
 Whilby
 Wilscomb, Somers.
 Wotton-under-Edge, Glouc, F
 26 Cliffe, Suffex
 27 Northall, Middl.
 28 GLOUCESTER
 Lanydos, Montg.
 Newbridge, Oxf.
 Stavord, Somers.
 29 Castle-carey, Somers.
 Lanvilling, Montg.
 Wallingford, Berks
 30 Somerton, Somers.
 OCTOBER
 1 Aberguilly
 Caerljon, Monm.
 Chudleigh, Devon.
 Clapon
 Congleton, Chesh.
 Cromstock, Devon.
 Crekelade, Wilts, S
 Croydon, Surry
 Manchester, Linc. S
 Ruthyn, Denb. M
 2 Bakewell, Derb.
 Baldock, Hertf.
 Beckington, Devon.
 Bedford
 Bradninch, Devon.
 Braintree, Essex, W
 2 Bridgwater, Somers.
 1 Daventry, Northamp.
 Devizes, Wilts.
 Dover, Kent
 Dunston, Wilts.
 Eastread
 St. Edmund's Bury, Suff. W
 Hambro, Hampsh.
 Helmesley, Yorksh. S
 Holding
 Houlsworth, Devon. S
 St. Ives, Hant. M
 Katherine-hill by Guilf. Surry
 Keynton, Warw.
 Lamborn, Berks
 Lelkard, Cornw.
 Lidbury, Heref.
 Lime, Dorset.
 Limington, Hampsh.
 Maiden Bradley, Wilts.
 Malden, Essex
 Malborough, Wilts.
 Midnai
 Newport, Glouc.
 North Taunton, Devon.
 Nottingham, W F S
 Reading, Berks.
 Sern Abby, Devon.
 Sherston, Wilts.
 Shrewsbury, Shrop.
 Sittingham
 Stafford
 Waldgrove, Berks
 Warbridge, Cornw.
 Wendover, Bucks.
 Weyhill, Hampsh.
 Weymer
 Winny
 Witham, Essex, T
 Witheral
 Woodham-ferris, Essex
 Woodstock, Oxf.
 3 Derby
 Yarum Castle, Wilts.
 4 Penkridge, Staff. T
 5 Lamport, Somers.
 Langavilling
 6 Malton, Yorksh.
 8 Challock, Kent
 9 Caerfilly, Glam.
 Carmarthen
 Dolgeth, Merion. T
 Grisman, Monm.

Kingstland, Heref.
 20 Aberconway
 St. Alban's, Hertf.
 Ashborn-peak, Derb.
 Balmstock
 Basingstoke, Hampsh. W
 Birmingham, Warw. Th
 Bishops Stortford, Hertf. Th
 Blackheath, Kent
 Blockly, Oxf.
 Bloxon, Oxf.
 Bookham, Surry
 Borough, Somersf.
 Btont, Devon.
 Bridport, Dorset.
 Burwel
CANTERBURY, Kent.
 Chagford, Devon.
CHESTER
 Chestock, Dorsetsh.
CHICHESTER, Suffex
 Chrish
 Chulbury, Oxf.
 Cockermouth, Cumb. M.
 Dieping, Wilts, Th
 Eastlow, Cornw.
 Glastenbury, Somersf.
 Hadley, Suff. M.
 Hay, Breck.
 Higham, Kent
 Higham-ferris, Northamp.
 Highworth, Wilts
 Hull, Yorksh. Th
 Kasbuckon, Glam.
 Keynton, Wilts.
 Killingworth, Northumb.
 Lancaster
 Lanilangle
 Lavanham, Suff. T
 Leicester
 Lochyr
 Ludlow, Shrop.
 Machynleth, Montg.
 Mere, Wilts
 Methur
 Milbrook, Coraw.
 Michael Dean, Glouc. M
 Milliner
 Milverton, Somersf.
 Mounts-Bay, Cornw.
 Ower, Dorsetsh.
PETERBOROUGH, North-
 ampton

Pontipole, Monm.
 10 Selby, Yorksh.
 Shelford, Bedf.
 S ttingborn, Kent.
 Southbrent, Somersf.
 Stonehouse, Glouc.
 Stow, Linc.
 Tavistock, Devon.
 Tewksbury, Glouc.
 Thame, Oxf. T
 Tilverton
 Tinmouth
 Tiverton, Devon. T
 Torrington, Devon.
 Tréwin, Cornw.
 Uxbridge, Middl.
 11 Castor, Linc. S
 Caxton, Camb. T
 Redruth, Cornw.
 Sevenoke, Kent
 13 **SALISBURY**, Wilts
 14 Button-Moor
 15 Wead, Essex
 16 Bosworth, Leic.
 17 Chapel in Frith, Derb.
 St. Faith's by Norwich
 Gainsborough, Linc.
 Gayworth by Lynn
 Havant, Hampsh.
 Maidstone, Kent
 Rochford, Essex
 Wantage, Berks
 18 Christ-Church, Hampsh.
 Worlop, Notting.
 19 Bishops Stortford, Hertf.
 Caerfilly, Glam.
CHICHESTER, Suffex
 Dundogil, Cornw.
 Pont-Stephen
 Swansay, Glam.
 Yarum, Yorksh.
 20 Ashborn-Peak, Derb.
 Blith, Notting.
 Broadelis, Devon.
 Devizes, Wilts
 Eltham, Kent
 Harborough, Leic. T
HEREFORD
 Sawbridgeworth
 Thorock-graies, Essex
 21 Cliffe, Suffex
 Downs, Cornw.
 Sheepwash, Devon.

- 22 WELLS, Somersf.
 23 Bolton-forness.
 Langoveth
 Saffron Walden, Essex.
 YORK.
 24 Aberstow
 Charing, Kent
 Chrustrum
 Colchester, Essex
 Drayton, Shrop.
 Edmonstow, Notting.
 Gravesend, Kent
 Hitching, Hertf.
 Hodnet, Shrop.
 Leighton-buzzard, Bedf.
 Marshfield, Glouc. T
 Newport, Montg.
 Royston, Hertf.
 Stanton, Linc. M
 Stopford
 Stow in the Wold, Glouc..
 Sturmister, Dorsetsh.
 Tamworth, Staff.
 Tunbridge, Kent
 WINCHESTER, Hampsh.
 Windsor
 25 Queen's-Camel, Somersf.
 Whitchurch, Hampsh. F
 26 Affington, Devon.
 Market-Jew, Cornw..
 28 Malmsbury, Wilts
 29 Arden, Yorksh.
 Ashwell, Hertf.
 Bampton, Devon.
 Banbury, Oxf.
 Barnet, Hertf.
 Brickhill, Bucks
 Bridgenorth, Shrop.
 Burton on Trent
 Chagford, Devon.
 Charney
 Chaulton, Kent
 Cheddar, Somersf.
 Chippenham, Wilts.
 Chislebury, Somersf.
 Cliffe, Northamp.
 Corfe-Castle, Dorsetsh.
 ELY, Camb.
 Everly-Green, Berks..
 Ewel, Surry
 Farrington, Berks
 Halefworth, Suff. T
 Hampton Road, Glouc.
 Hatfield, Hertf.
 29 Henley, Warw. M
 Hindon, Wilts
 Holt, Norfolk
 Kidwilly
 Knotsford, Chesh.
 Lantrissent, Glam.
 St. Lawrence, Cornw.
 Marlow upon Thames, Bucks, S
 Middlewich, Chesh. T
 Midway
 Neware
 Newark, Notting.
 Newcastle upon Tyne
 Newnham, Glouc.
 Newton Peopleford, Devon.
 Pamphile, Dorsetsh.
 Piddletown, Dorsetsh.
 Plymouth, Devon. M Th S
 Radnor, Th
 Thriak, Yorksh. M
 Tiddeisdale, Derb.
 Tocester, Northamp.
 Torist, Yorksh.
 Uphaven, Wilts
 Usk, Monm.
 Wellingborough, Northam. W
 Wigan, Lanc. M F
 Winterborn, Glouc.
 Wrickley
 30 Frideswin, Oxf.
 *NOVEMBER
 1 COVENTRY, Warw. F
 Lanibithew
 Lantham
 Newport
 Newport-pagnel, Bucks
 Stokesley, Yorksh. S
 2 Wye, Kent
 3 Bicklefworth, Bucks
 4 Appleshaw, Hampsh.
 5 Beverley, Yorksh.
 Ratfdale, Lanc.
 6 Whamerly
 8 Aberconway
 Ashby-de-la-Zouch, Leic.
 Bidderden
 Blandford, Dorsetsh.
 Chillam, Kent
 Chipping-norton, Oxf.
 Cirencester, Glouc.
 Columpton, Devon.
 Dis, Norf. F
 Droitwich, Worc. F
 Dalverton, Somersf.

- 8 Exmouth, Devon.
Hallaton, Leic.
Hatherly, Devon.
Helston, Cornw.
Hertford
Lanedy
Lemster, Heref.
Lifton, Devon. S
Lower Knotsford, Chesh.
St. Michael's, Cornw.
Milborn Port, Somersf.
Needham, Suff. W
Newbury, Berks
Newland, Cornw.
Newmarket, Suff. Th
OXFORD
Pensford, Somersf.
Preston in Holdernefs
Ragland, Monm.
Rochdale, Lanc. T
Rumsey, Hampsh.
Somerton, Somersf.
Southbovey, Devon.
Stratton, Cornw.
Talsarn-green
Totnefs, Devon.
Warmister
Warwick
9 Albrighton, Shrop.
10 Falmouth, Cornw.
ROCHESTER, Kent.
Rofs, Heref.
11 Ruthyn, Denb.
12 Beesley, Glouc.
Bicklesworth, Bucks
Bishops-castle, Shrop.
Blackney, Glouc.
Bleechingley
Botley, Hampsh.
Brombel, Somersf.
Castlemain
Chelmsford, Essex
Culliton, Devon. Th
Fairford, Glouc.
Haley, Berks
Kellington, Cornw.
Keilom, Cornw.
North Moulton, Devon.
Pool, Dorseth. M Th
Sawley, Derb.
Wallingford, Berks.
Wilton, Wilts
Witham, Essex
12 Woodstock, Oxf.
13 Bookland, Devon.
Chard, Somersf.
Epping, Essex
Kingston upon Thames, Surry
Leek, Staff.
Leftwithiel, Cornw.
Loughborough, Cornw.
Macclesfield, Chesh.
Mayfield, Suffex
Ockingham, Berks
Padam-basson, Norf.
Wotton-bassiet, Wilts
YORK
14 Carmarthen
15 Bedford
17 Andover, Hampsh.
Brecknock
Bridgend, Glam. S
Colberick, Wilts
Launceston, Cornw.
Lesford, Lanc.
Mayling, Kent
Morton in Holdernefs, Yorksh.
Newport, Monm.
Newport-pagnet, Bucks
Newport-pond, Essex
Newton-bushel, Devon.
Otterford, Somersf.
Salford
Stanley, Glouc. S
Stepham, Somersf.
Storford, Hertf.
Sutton, Hampsh.
Tockington, Glouc.
Tregony, Cornw.
Trigney, Lanc.
Wellington
Wetshad
Yeovil, Somersf.
18 Bridlington, Yorksh. S
21 Aberwingreen-cliffe
Garstang, Lanc. Th
Lampport, Somersf.
Lanibeth
Lenton, Notting.
Loddon, Norfolk
Rugby, Warw.
Shefnal, Shrop.
Wem, Shrop.
22 St. Aberkenn
Ashburton, Devon. T S
Boscastle, Cornw.

354 A List of the Fix'd FAIRS, &c.

- | | |
|---|---|
| <p>22 Bottingham, Yorksh.
Bow, Devon, Th
Camburn, Cornw.
Doddington, Oxf.
Dover, Kent
St. Edmund's Bury, Suff.
Ellismere, Shrop.
Falkingham, Linc. Th
Frome, Somers.
Guildford, Surry
Martin's Town, Dorset.
Newcastle under Line
Nunny, Somers.
Pembroke, Heref.
Perlock, Somers.
Skipton, Yorksh. S
Tream
Whitleygridge
24 Ashamstead, Berks.
Machynleth, Montg.
28 GLOUCESTER
Harlow, Essex
Hide
Hooksnorton, Oxf.
LINCOLN
Northampton
Spalding, Linc.
30 Horsham, Sussex
Truro, Cornw. W S
31 Dulton, Devon.
Health
Ingatestone, Essex
Sutton, Kent
D E C E M B E R
2 Ludlow, Shrop.
Marlborough, Wilts.
Matensley-green, Hamp.
Monmouth
Pennyfont
Sawthey
3 Bangor, Carn.
Bwelth
Caerling
Dursley, Glouc.
Kates Crofs, Essex
Lamborn, Berks
Sandwich, Kent W S
Tuddington, Bedf.
Witney, Oxf.
4 Coward, Glouc.
5 Headon, Yorksh.
Higham Ferris, Northamp.
Launceston, Cornw.
6 Enfield, Middl.</p> | <p>9 Ashborn-Peak, Derb.
9 Boston, Linc.
Kimbolton, Hunt.
Warrington, Lanc.
10 Abingdon, Bedf.
Amptill, Bedf.
St. Andrew's Milborn, Dorset.
St. Austel, Cornw.
Baldock, Hertf.
Bewnly, Wore.
Brackley, Northamp. W
Bradford, Wilts
Broadbenbury, Devon.
Cradiffe, Glam.
Chippenham, Wilts
Chorly, Devon.
Cobham, Surry
Collingborough, Wilts.
Cromwell, Glouc.
Cubley, Derb.
Culliton, Devon.
Grinstead, Sussex
Harleigh, Merion.
Maidenhead, Berks
Maiden Bradley
Market Jewy, Cornw.
Moreton, Devon.
Newbury, Berks.
Oswestry, Shrop.
Petersfield, Hampsh.
Prue Preston
Ringwood, Hampsh.
ROCHESTER, Kent
Rofs, Heref.
Stretton, Cornw.
Tavistock, Devon.
Wakefield, Yorksh.
15 Atherston, Warw.
Northampton
16 Colgeth
Newton, Linc.
Pluckley
17 Arundel, Sussex
Bodmin, Cornw.
Camb, Somers.
Cranborn, Dorsetsh.
St. Eades
EXETER, Devon.
Grantham, Linc. S
Heathring
Hemingham, Essex
Hornsey, Yorksh.
St. Nicholas, Glam.</p> |
|---|---|

17 North-

North Taunton, Devon.	Cardigan
Northwich, Chesh.	Clethero, Lanc.
Sevenoke, Kent.	Hoxham
Sidland, Dorseth.	Leicester
Spalding, Line.	Malpas, Chesh.
Tockington, Glouce.	Truro, Cornw.
Wallingford, Berks.	19 Wotton Bassett, Wilts.
Woodstock, Oxf.	21 Marywick, Cornw.
18 Sandhurst	22 Newport
19 Beaumaris, Angl.	24 Ambresbury, Wilts. F

An Alphabetical LIST of the MOVEABLE FAIRS.

Note, M stands for Monday, T for Tuesday, W for Wednesday, Th for Thursday, F for Friday, S for Saturday, Sun for Sunday.
The Letters in () denote the Market-Days of those Towns not mentioned in the Fix'd Fairs.

A Berforth, Yorksh. W. after Trinity Sun	Ashwater, Devon. M after Lammas-day
Abergavenny, Monm. Trinity T	Axminster, Devon. W. after Michaelmas-day
Abingdon, Berks. first M in Lent, and M before Michaelmas-day	Aye or Eye, Suff. Whit M (S)
Abbey-Milton, Dorseth. T after St. James's-day	Bampton, Devon. Whit T
Abridge, Essex, Easter M	Banbury, Oxf. Th after Twelfth-day, first Th in Lent, Holy Th, Trinity Th, Th after Michaelmas-day, and Th before St. Andrew's-day
Acton, Good F	Basing-downs, Hampsh. Easter T
Affrington, Devon, every W in Quarter Sessions Week	Basingstoke, Hampsh. Whit. W
Agmondesham or Amerham, Bucks. Whit M (T)	Bassilton, Hampsh. M after July 7.
Alesbury, Bucks. Palm Sun	Beaumaris, Angl. Ascension-day
Alesford, Hampsh. Holy Th	Bedford, first T in Lent
Amphill, Bedf. Good F	Bedington, Surry, Easter M
Andover, Hampsh. F before Mid-lent Sun	Beggars-Bush, Middl. Holy Th
Appleby, Westm. Whit. M (S)	Berkhamstead, Hertf. Shrove M
Ashborn, first Th in June, and first Th in March	Berrington, Somers. Trinity M
Ashby-de-la-Zouch, Leic. Whit. T	Beverley, Yorksh. Easter W. and all Rogation-week
Ashford, Kent, first Sun after St. Bartholomew's-day	Bicester, Oxf. F before Michaelmas, and the next F
Ashhill. Somers. W after Sept. 8. and Easter W	Bickleworth, Bucks. S in Easter-week

356 *A List of the Moveable FAIR'S*

- week, Whit M, M after Low Sun
 Billingsworth, Palm Sun
 Birmingham, Warw. Ascension-day, Corpus Christi
 Bishops-Stortford, Hertf. Corpus Christi
 Blacknel, Dorsetsh. M before St. Bartholomew's-day
 Bodmin, Cornw. S after Midlent Sun, and W after Whit Sun
 Pookland, Devon. Whit T
 Botley, Hampsh. T before Whit Sun, T before Shrove T, T before St. Bartholomew's-day
 Bow, Devon. Holy Th
 Bow, Middl. Th in Whitson-week
 Brackley, Northamp. second W in April
 Bradford, Wilts, Trinity M (M)
 Bradstead, Kent, Ascension-day
 Brailers, Easter T
 Bramyard, Heref. Th before March 5, and Whit M
 Bridgend, Glam. Ascension-day
 Bridgewater, Som. first Th in Lent
 Bridport, Dorsetsh. Holy Th
 Broad-henbury, Devon. Whit T
 Broad-street, Kent, Holy Th
 Broad-windfor, Dorset. Trinity M
 Broughton in Spurnace, M before St. Peter's-day
 Broughton, Hampsh. M after St. Peter's-day
 Burton, Somers. Good F
 Buckingham, M after Twelfth day
 Buckland, Kent, All Souls-day, and T after Whit Sun
 Budley, Devon, Good F (M)
 Burford, Oxf. S before Michaelmas, and the next S
 Burlington, Yorksh. Sun after Ascension-day
 Burnel, Good F
 Burton, Lanc. Whit M
 Burton, Linc. Ascension-day
 Burwill, Berks. Whit Th
 Bury, Lanc. Good F
 Caerfilly, Glam. Trinity M
 Caerlion, Monm. W before Easter
 Caerwigs, Corpus Christi
 Cakefield, Suff. Whit Th
 Cambleford, Cern. F after Mar. 10
 Camdene, Glouc. Ash W
 Canend, Oxf. Whit T
 Canterbury, Kent, Whit T
 Carlisle, Cumb. W before Easter, and first W in June
 Castle-carey, Somers. T before Palm Sun
 Castleheath, Wilts, M after St. James's-day
 Castletown, Dorf. S after Holy Th
 Cern Abby, Dorset. Midlent Sun, and Holy Th
 Chalbury, Oxf. second F in Lent, and second F in May
 Chapel in Frith, Derb. Ascen.-day
 Chapelrow, Berks, Good F
 Chapel-heath, Glam. Trinity M
 Cheltenham, Glouc. Holy Th
 Chestow, Monm. F before St. Luke's-day
 Cherrington, Dev. M after Sept. 8
 Chertsey, Surry, first M in Lent
 Chewiton, Somers. Holy Th
 Chichester, Suffex, Ash W, and Whit T
 Chidleigh, Devon. Easter T
 Chingar, Devon. Easter T
 Chipping, Whit T
 Chipping-norton, Oxf. last F in May, W before Midsummer-day, and W after
 Christ-Church, Hampsh. Trin. T
 Cilcutton, Cornw. Holy Th
 Cirencester, Glouc. Easter T, and Holy Th
 Cokermonth, Cumb. Whit M
 Cogshal, Essex, F in Whitson-week (S)
 Colebrook, Bucks, 3d W in April
 Comb-martin, Devon. Whit M
 Coventry, Warw. Easter T, Corpus Christi
 Creswel, Trinity M
 Cribby, Whit M
 Cricklade, Wilts, third W in April and third T in August
 Cullum, Corn. Th after Mid. Sun and Th after Allhallow's-day
 Curry-evil, Somers. M after Lamas-day
 Cutcomb, Somers. Holy Th
 Dalton, Lanc. W before Lady-d. (S)
 Darking, Surry, Ascen. day (Th)
 Darlington, Durham, Eas. M, fo- every

- every Fortnight after till
 Christmas (M)
 Dartington, Devon, M after Lam-
 mas-day
 Dayentry, Northamp. Easter T,
 and Whit T
 Denbigh, M before Lady-day
 Derby, F in Easter-week, and F
 in Whitson-week.
 Devizes, Wilts, Holy Th, and
 Trinity Th
 Dicker, Suffex, Holy Th
 Doddbrook, Devon. W before
 Palm Sun (W)
 Dolidge, Devon. Good F
 Dolton, Devon. W before Lady-d.
 Dorchester, Oxf. Easter T
 Dorchester, Dorsetsh. Trinity M
 Dorland, Dorsetsh. W before St.
 Bartholomew's-day
 Dorrington, Whit M
 Drayton, Shrop. W before Palm S
 Dryfield, Yorksh. Whit M, and
 Easter M
 Dulverton, Somers. the Feast is
 the Sun after July 7, and the
 Fair is the M after.
 Dunstable, Bedf. Ash W
 Dunster, Somers. Whit M (F)
 Eaton by Windsor, Bucks, Ash W
 Eccleshall, Staff. Ascension-d. (F)
 St. Edmundsbury, Suff. Good F
 Egglestow, Ascension-day
 Ellesmere, Shropsh. Whit T
 Elmoregreen, Dorsetsh. Holy Th
 Eltham in Kent, Palm M, and
 Whit M
 Enfield, Middl. Good F
 Englesfield, Suff. all Rogat. week
 Epping, Essex, Whit T
 Erith, Kent, Holy Th
 Evesham, Worc. M after Easter
 and Whit M
 Exeter, Dev. Ash W, and Whit M
 Falley, Warw. M after St Michael's
 Farnham, Surry, Holy Th
 Farringdon, Berks, Whit T
 Fenchemstead, Berks, Whit T
 Folkingham, Linc. Ash W
 Fowey, Cornw. Shrove T
 Frodinghay, Sun Fortnight after
 Midsummer-day
 Gainsborough, Linc. Easter M
 Gillingham, Dorset. Trinity M
 Godmanchester, Easter T
 Graies, Essex, Whit T
 Grantham, Linc. 5th Sun in Lent
 Great-Warley, Essex, Whit M
 Green-Rect, Th before Ascen-
 sion-day
 Guildford, Surry, Good F
 Hadlow, Kent, Whit M
 Hallaton, Leic. Ascension-day
 Hammock, Easter T
 Hampton-Road, Glou. Trinity M
 Harfley-green, Lanc. Whit M
 Hartland, Dev. Easter W, Whit T
 Hatfield, Hertf. Good F
 Haverhil, Th after July 3
 Helmiton, Suffex, fifth Sun in
 Lent (Th)
 Helston, Cornw. 2 Fairs the two
 S before St. Thomas's-day, and
 S before Midlent Sun, and S be-
 fore Palm Sun, and Whit M
 Hempstead, Hert. Th after Trinity
 M, and second M in Sept. (Th)
 Henley on Thames, Oxf. Holy
 Th, Trinity Th, and Th be-
 fore Midsummer-day
 Hereford, Easter W, and T after
 Candlemas-day
 Hertford, S before the fifth Sun
 in Lent
 Mickfield, Hamp. Good F
 High-beach, Essex, Whit M, and
 S before St. Thomas's-day
 Hilmarion, Wilts, Easter M
 Hindon, Wilts. M before Whit Sun
 Hinkley, Leic. third M after
 Twelfth-day
 Hitching, Hertf. Easter T
 Hounslow, Middl. Trinity M
 Huntingdon, Good F
 Ightham, Kent, W in Whitson-
 week, called Coxcomb Fair
 Ilchester, Som. M before Palm Sun
 Illey, Berks, Easter W and Whit W
 Ingham, Norf. Trinity M
 Inglesfield, Lanc. M before Holy Th
 Ingleswait, M before Holy Th
 St John's, Worc. F after Palm Sun
 Ipswich, Suff. Good F
 St. Ives, Cornw. Good F, and S
 before Advent Sun
 St. Ives, Hunt. Whit M
 Kederminster, Worc. Holy Th,
 and Whit Th Kel-

- Kellington, Cornw. Trinity Th.
 Holy Th
 Kemfing, Easter T
 Knotsford, High, Chesh. Whit T
 Kerby-stephens, Westm. Whit M
 Kettering, Northam. Th before
 Easter, Th before Michaelmas-
 day, and Th before St. Tho-
 mas's-day.
 Kingston upon Thames, Surry,
 Palm Sun, Whit Th
 Kington, Heref. W before Easter,
 Whit M
 Kinnow, Ascension-day.
 Knevestock, Essex, Whit T
 Lambard's-Castle, Dorsetsh. W
 before Midsummer-day.
 Lamborn, Berks, Whit M
 Lancarvan, Glam. Good F
 Lancaster, Palm Sun
 Landaff, Glam. Whit M
 Landaron, Palm Sun.
 Landyffel, Th before Palm Sun
 Langport, Som. second T in Lent.
 Lanson, Corn. Whit M
 Lanvilling, Montg. W before East
 Lanwist, Corpus Christi
 Layton-buzzard, Whit T.
 Leck, Staff. Whit M.
 Leicester, Palm Sun
 Lutter, Heref. T before Midlent
 Sun
 Lenham, Kent, Whit M
 Leskard, Cornw. Shrove M, Holy
 Th, and M before Palm Sun
 Lewes, Sussex, Whit M (S)
 Leynord-stanly, Glouc. S after St.
 Swithin's-day
 Lodbury, Heref. M before Easter,
 M before St. Luke's-day, and
 M before St. Thomas's-day.
 Lidford, Somersetsh. Holy Th
 Liston, Devon. Holy Th
 Lindedon, Whit W
 Linton, Cambr. Whit M
 Litchfield, Staff. every Th after
 Twelfth-day for three Weeks,
 and Ash W and F before Si-
 mon and Jude
 Longner, Good F.
 Longuir, Staff. Whit T
 Lowth, Linc. 3d. Sun after Easter
 Ludlow, Shrop. M before Easter
 Lutterworth, Leic. Ascension-day
 and Th after Twelfth-day (Th)
 Magron, Monm. every M in Lent
 Maidenhead, Berks, Whit W
 Maldon, Essex, Whit T
 Malling, Kent, Good F
 Malton, Wilts, M after Easter
 Manchester, Lanc. Whit M
 Margum, Glam. Good F
 Market Jew, Cornw. Palm M
 Good F
 Marigate, Easter W
 St. Mary Ottery, Devon. T be-
 fore Palm Sun, and Trinity T
 Melton-mowbray, Leic. M after
 Twelfth-day, and Whit T
 Michael-dean, Glouc. Easter M
 St. Michael's, M after St. Mich-
 el's day
 Middleham, Yorksh. Whit M (M)
 Middlewich, Chesh. Ascension-
 day
 Midhurst, Suffex, Whit T
 Midlome, Whit M
 Midsummer-norton, Som. Good F
 Milling, Dorf. Palm-Sun Good F
 Milverton, Somersf. Easter T
 Minster, Isle of Sheppy, Kent.
 Palm M.
 Monmouth, Whit T
 Morpeth, Northum. Holy Th Eve
 Motion, Hamph. Trinity Th
 Mount, Corn. M after Midl. Sun
 Neath, Glam. Trinity Th
 St Neot's, Hunt. Cor. Christi (T)
 Newark on Trent, Whit. W
 Newbury, Berks, first M in Lent,
 Holy Th
 Newcastle under Line, F after
 Twelfth-day, M after Low Sun
 Newent, Glouc. M before Easter,
 W before Whit Sun, and F after
 Sept. 8.
 New-Inn, Whitsun Eve
 Newport, Hamph. Whit M, and
 Palm Sun
 Newport, Montg. Corpus Christi
 Newton-bushel, Devon. first W
 in September
 Norfe, Devon. Good F
 Northallerton, Yorksh. every W
 from Christmas till June
 Northampton, every F from Christ-
 mas till June North-

North-ch
 Michan
 North-Ro
 Whit
 North-m
 in M
 North-it
 Norwich
 and T
 Nutly, S
 Ockingh
 Shrow
 Ockingh
 Marc
 first V
 Midfu
 Odiham
 lent
 Okehan
 Marc
 Osmk
 Oulney
 Oundle
 Oxford
 Paisw
 Pedlete
 Penha
 Penny
 Penfar
 Th
 Plym
 Lul
 Plym
 St. P
 Ponte
 and
 Point
 Potte
 3d
 Prefe
 Pric
 Que
 Rad
 Rad
 Ray
 Ray
 Ric
 Rip
 Rif
 Ro
 Ro
 Ro
 Ro
 Ro

North-church, Hertf. S before Michaelmas
North-Rect, Kent, Easter T, and Whit T.
North-moulton, Dorsetsh. first T in May
North-street, Easter T
Norwich, Maundy Th, Whitson and Trinity Eves
Nutly, Suffex, Good F
Ockingham, Berks, Th before Shrove T
Ockington, Devon. second T. in March, first T in September, first W in October, and W after Midsummer-day
Odiham, Hampsh. S before Midlent Sun.
Okehampton, Devon. 2d Th in March, and first T in September
Omskirk, Lanc. Whit M
Oulney, Bucks, Easter M
Oundle, Northamp. Whit M (S)
Oxford, Easter T
Painwick, Glouc. Whit T
Pedleton, Dorsetsh. Easter T
Penhall, Cornw. Holy Th
Penryth, Cumb. Whit T
Pentance, Cornw. Trinity Th and Th before Advent Sun
Plymouth, Devon. Th after St. Luke's day
Plympton, Devon. Holy Th
St. Pomb's, Good F
Pontefract, Yorksh. Palm Sun Eve and Trinity Eve
Point-stephen, Whit W
Potton, Bedf. third T in January, 3d T in July, and Good F (S)
Prescot, Lanc. Corpus Christi
Prickwell, Essex, St Swithun's day
Queen's cammel, Som. Trinity Th
Radnor, Trinity M
Raddal, Lanc. Whit T
Ray, Essex, Trinity M
Rayleigh, Essex, Trinity M (S)
Rich, Camb. all Rogation week
Rippon, Yorksh. Ascension day
Rilborough, Good F (S)
Rochford, Essex, Whit T
Rond, Ascension-day
Rosa, Heref. Ascension-day, and Corpus Christi
Rowel, Northam. Trinity M (M)

Roylton, Hertf. Ash W, and W in Whitson-week
Ruilly, Trinity M
Rumsey, Hampsh. Easter M
Rye-hill, Whit M
Rygate, Surry, Whit M and W in Whitson week (T)
Saffron-Walden, Essex, Midl. Sun
Sale, Kent, Whit Th
Salford, Whit M
Salisbury, first Sun in Lent, T after Twelfth-day, M before Lady-day, Whit T, and Th after St. Michael's-day
Saltwich, Worc. Good F
Sandbach, Chesh. Easter T and W, and Th and F before Christmas (Th)
Sandbury, Easter T
Scarborough, Yorksh. Holy Th (Th S)
Scholde, Easter T
Searn-Abby, Midlent Sun, and Holy Th
Selby, Yorksh. T after Easter
Senbury, Corpus Christi
Shaftsbury, Dorsetshire, S before Palm Sun
Sherborn, Dorsetsh. first M in Oct.
Shrewsbury, Shropsh. W after Ascension-day
Sittingborn, Kent, Whit M
Skipton upon Craven, York. Whit M, S in Easter week, and Trinity M
Sleaford, Linc. Whit M (M)
Sodbury, Glouc. Holy Th, and fifth Sun in Lent
Soham, Camb. M before St John the Baptist
Somerton, Th after Easter, T before Holy Th, and T after Palm Sun
Sofing, M before Easter
Southampton, Trinity M
Southaven, Yorksh. Trinity M
Southbovey, Devon. Holy Th
Southel, Middl. W in Easter week and second W in October
South-Moulton, Devon. S before June 11, and first T in September (S)
Spillsby, Linc. Trinity M (M)
Stafford

- Kellington, Cornw. Trinity Th.
 Holy Th
 Kemfing, Easter T
 Knotsford, High, Chesh. Whit T
 Kerby-Stephen, Westm. Whit M
 Kettering, Northam. Th before
 Easter, Th before Michaelmas-
 day, and Th before St. Tho-
 mas's-day.
 Kingston upon Thames, Surry,
 Palm Sun, Whit Th
 Kington, Heref. W before Easter,
 Whit M
 Kinnow, Ascension-day.
 Knevestock, Essex, Whit T
 Lambert's-Castle, Dorsetsh. W
 before Midsummer-day.
 Lamborn, Berks, Whit M
 Lancarvan, Glam. Good F
 Lancaster Palm Sun
 Landaff, Glam. Whit M
 Landaron, Palm Sun.
 Landysfel, Th before Palm Sun
 Langport, Som. second T in Lent.
 Lanson, Corn. Whit M
 Lanvilling, Montg. W before East
 Lanwist, Corpus Christi
 Layton-buzzard, Whit T.
 Leck, Staff. Whit M.
 Leicester, Palm Sun
 Lenton, Heref. T before Midlent
 Sun
 Lenham, Kent, Whit M
 Leskard, Cornw. Shrove M, Holy
 Th, and M before Palm Sun
 Lewes, Sussex, Whit M (S)
 Leynord-stanly, Glouc. S after St.
 Swithin's-day
 Lidbury, Heref. M before Easter,
 M before St. Luke's-day, and
 M before St. Thomas's-day.
 Lidford, Somersetsh. Holy Th
 Lifton, Devon. Holy Th
 Lindedon, Whit W
 Linton, Cambr, Whit M
 Litchfield, Staff. every Th after
 Twelfth-day for three Weeks,
 and Ash W and F before Si-
 mon and Jude
 Longner, Good F.
 Longuir, Staff. Whit T
 Lowth, Linc. 3d. Sun after Easter
 Ludlow, Shrop. M before Easter
 Lutterworth, Leic. Ascension-day
 and Th after Twelfth-day (Th)
 Magron, Monm, every M in Lent
 Maidenhead, Berks, Whit W
 Maldon, Essex, Whit T
 Malling, Kent, Good F
 Malton, Wilts, M after Easter
 Manchester, Lanc. Whit M
 Margum, Glam. Good F
 Market Jew, Cornw. Palm M,
 Good F
 Margate, Easter W
 St. Mary Ottery, Devon. T be-
 fore Palm Sun, and Trinity T
 Melton-mowbray, Leic. M after
 Twelfth-day, and Whit T
 Michael-dean, Glouc. Easter M
 St. Michael's, M after St. Micha-
 el's day
 Middleham, Yorksh. Whit M(M)
 Middlewich, Chesh. Ascension-
 day
 Midhurst, Suffex, Whit T
 Midlome, Whit M
 Midsummer-norton, Som. Good F
 Milling, Dorf. Palm-Sun Good F
 Milverton, Somersf. Easter T
 Minster, Isle of Sheppy, Kent.
 Palm M.
 Monmouth, Whit T
 Morpeth, Northum. Holy Th Eve
 Motion, Hampsh. Trinity Th
 Mount, Corn. M after Midl. Sun
 Neath, Glam. Trinity Th
 St Neot's, Hunt. Cor. Christi (T)
 Newark on Trent, Whit. W
 Newbury, Berks, first M in Lent,
 Holy Th
 Newcastle under Line, F after
 Twelfth-day, M after Low Sun
 Newent, Glouc. M before Easter,
 W before Whit Sun, and F after
 Sept. 8.
 New-Inn, Whitsun Eve
 Newport, Hampsh. Whit M, and
 Palm Sun
 Newport, Montg. Corpus Christi
 Newton-bushel, Devon. first W
 in September
 Norfe, Devon. Good F
 Northallerton, Yorksh. every W
 from Christmas till June
 Northampton, every F from Christ-
 mas till June North-

North-church, Hertf. S before Michaelmas
 North-fleet, Kent, Easter T, and Whit T.
 North-moulton, Dorsetsh. first T in May
 North-street, Easter T
 Norwich, Maundy Th, Whitson and Trinity Eves
 Nutly, Suffex, Good F
 Ockingham, Berks, Th before Shrove T
 Ockington, Devon. second T. in March, first T in September, first W in October, and W after Midsummer-day
 Odiham, Hampsh. S before Mid-lent Sun.
 Okehampton, Devon. 2d Th in March, and first T in September
 Omskirk, Lanc. Whit M
 Oulney, Bucks, Easter M
 Oundle, Northamp. Whit M (S)
 Oxford, Easter T
 Paiswick, Glouc. Whit T
 Pedleton, Dorsetsh. Easter T
 Penhall, Cornw. Holy Th
 Penryth, Cumb. Whit T
 Penfance, Cornw. Trinity Th and Th before Advent Sun
 Plymouth, Devon. Th after St. Luke's day
 Plympton, Devon. Holy Th
 St. Pomb's, Good F
 Pontefract, Yorksh. Palm Sun Eve and Trinity Eve
 Point-stephen, Whit W
 Potton, Bedf. third T in January, 3d T in July, and Good F (S)
 Prescot, Lanc. Corpus Christi
 Prickwell, Effex, St Swithun's day
 Queen's cammel, Som. Trinity Th
 Radnor, Trinity M
 Raddal, Lanc. Whit T
 Ray, Effex, Trinity M
 Rayleigh, Effex, Trinity M (S)
 Rich, Camb. all Rogation week
 Rippon, Yorksh. Ascension day
 Risborough, Good F (S)
 Rochford, Effex, Whit T
 Rond, Ascension-day
 Rois, Heref. Ascension-day, and Corpus Christi
 Rowel, Northam. Trinity M (M)

Royston, Hertf. Ash W, and W in Whitson-week
 Ruilly, Trinity M
 Rumsey, Hampsh. Easter M
 Rye-hill, Whit M
 Rygate, Surry, Whit M and W in Whitson week (T)
 Saffron-Walden, Effex, Midl. Sun
 Sale, Kent, Whit Th
 Salford, Whit M
 Salisbury, first Sun in Lent, T after Twelfth-day, M before Lady-day, Whit T, and Th after St. Michael's-day
 Saltwich, Worc. Good F
 Sandbach, Chesh. Easter T and W, and Th and F before Christmas (Th)
 Sandbury, Easter T
 Scarborough, Yorksh. Holy Th (Th S)
 Scholde, Easter T
 Searn-Abby, Midlent Sun, and Holy Th
 Selby, Yorksh. T after Easter
 Senbury, Corpus Christi
 Shaftsbury, Dorsetshire, S before Palm Sun
 Sherborn, Dorsetsh. first M in Oct.
 Shrewsbury, Shropsh. W after Ascension-day
 Sittingborn, Kent, Whit M
 Skipton upon Craven, York. Whit M, S in Easter week, and Trinity M
 Sleaford, Linc. Whit M (M)
 Sodbury, Glouc. Holy Th, and fifth Sun in Lent
 Soham, Camb. M before St John the Baptist
 Somerton, Th after Easter, T before Holy Th, and T after Palm Sun
 Sosing, M before Easter
 Southampton, Trinity M
 Southaven, Yorksh. Trinity M
 Southbovey, Devon. Holy Th
 Southel, Middl. W in Easter week and second W in October
 South-Moulton, Devon. S before June 11, and first T in September (S)
 Spillsby, Linc. Trinity M (M)
 Stafford

- Stafford, T before Shrove T
 Stamford, Linc. Sun after Corpus Christi, and Midlent Sun
 Stockbridge, Hampsh. Holy Th
 Stockclear, Whit M
 Stockley, Yorksh. S after April 23
 Stockport, Chesh. Ascension-day, and Corpus Christi
 Stockenham, Devon. Good F
 Stokesley, Yorksh. Trinity M
 Stow in Guillam, F in Whitsun-week
 Stow, Monm. Whit T
 Stratford on Avon, Warw. Ascension-day
 Sudbury, Suff. last Th in April
 Sudminster, Essex, Th before Easter, Ascension-day
 Swansey, Glam. second S in May
 Swindon, Wilts, second M in May and second M in December
 Tamworth, Staff. Ash W
 Tedbury, Glouc. Ash W
 Thame, Oxf. Michaelmas-day, and the next T
 Thaxsted, Essex, Sun after Ascension-day.
 Thorn, Yorksh. first M in June
 Thornbury, Glouc. Easter M, and M before St. Thomas's-day
 Thorncomb, Devon. Easter T
 Tiverton, Dev. T after Trinity Th
 St. Tossels, Cornw. Good F, and Whit T
 Treewin, Cornw. Easter T
 Tregony, Cornw. Shrove T
 Truro, Cornw. W after Midlent Sun, and Whit W
 Tunbridge, Kent, Ash W, and Trinity M
 Upper-Ottery, Devon. first W in October.
 Upton on Severn, Worc. Whit Th
 Uiscum, Devon. Good F
 Usk, Monm. Trinity M
 Wakefield, Yorksh. third T in August.
 Walgrove, Berks, Whit M
 Wallingford, Berks, Th before Easter.
 Waltham upon Thames, Surry
 W in Easter-week
 Wandsworth, Surry, Whit M
 Watford, Heref. Trinity M
 Webley, Heref. Holy Th, and Trinity Th (Th)
 Welden, first W in February, and first W in May
 Wellingborough, Northamp. W in Easter-week
 Westbury, Wilts, first F in Lent, and Whit M (F)
 Witchurch, Hampsh. Whit M
 Wickham, Bucks, S before Lent
 Wiggan, Lanc. Ascension-day
 Wimbleton, Surry, M after Lady-day
 St. Winard, Monm. Whit W
 Winborn, Dorset. Good F
 Winchester, Hamp. first M in Lent
 Windsor, Berks, Easter T
 Winterborn, Glouc. second Th in February, and second Th in May
 Wisbich, Cambr. M before Lady-day, Palm M, and Whitsun Eve
 Witham, Essex, Allhallow's-day, and Trinity M
 Witheridge, Dev. W after April 15
 Witney, Oxf. Holy Th
 Witney-statute, Oxf. Th before Michaelmas, and the next Th
 Woodcut, Oxf. M after Nov. 5
 Woodstock, Oxf. Whit T and Th after Allhallow's-day
 Woodstock-statute, September 21 and the next Th
 Worcester, S before Palm Sun, and S after Easter
 Yarmouth, Norf. F before Good F (S)
 Yarum, Yorksh. 3d Th in April, Holy Th, and Th after Lady-day.

T A B L E S

Shewing by INSPECTION, the

I N T E R E S T

O F A N Y

N U M B E R o f P O U N D S

F R O M

One, progressively to One Hundred;

A T T H E

RATES of 3, $3\frac{1}{2}$, 4 and 5 *per Cent. per Ann.*
from one Day to thirty Days, and from
one Month to a Year; and by the Addi-
tion of only two Numbers, the INTEREST
of any larger Sum, commonly negotiated
in TRADE, the publick Stocks, or Mort-
gages, may be known for the same Time.

[illegible]

ONE DAY.

363

Lat	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	1	—	—	1	—	—	1	—	—	1
7	—	—	1	—	—	1	—	—	1	—	—	1
8	—	—	1	—	—	1	—	—	1	—	—	1
9	—	—	1	—	—	1	—	—	1	—	—	2
60	—	—	1	—	—	1	—	—	1	—	—	2
1	—	—	1	—	—	1	—	—	1	—	—	2
2	—	—	1	—	—	1	—	—	1	—	—	2
3	—	—	1	—	—	1	—	—	1	—	—	2
4	—	—	1	—	—	1	—	—	1	—	—	2
5	—	—	1	—	—	1	—	—	1	—	—	2
6	—	—	1	—	—	1	—	—	1	—	—	2
7	—	—	1	—	—	1	—	—	1	—	—	2
8	—	—	1	—	—	1	—	—	1	—	—	2
9	—	—	1	—	—	1	—	—	1	—	—	2
70	—	—	1	—	—	1	—	—	1	—	—	2
1	—	—	1	—	—	1	—	—	1	—	—	2
2	—	—	1	—	—	1	—	—	1	—	—	2
3	—	—	1	—	—	1	—	—	2	—	—	2
4	—	—	1	—	—	1	—	—	2	—	—	2
5	—	—	1	—	—	1	—	—	2	—	—	2
6	—	—	1	—	—	1	—	—	2	—	—	2
7	—	—	1	—	—	1	—	—	2	—	—	2
8	—	—	1	—	—	1	—	—	2	—	—	2
9	—	—	1	—	—	1	—	—	2	—	—	2
80	—	—	1	—	—	1	—	—	2	—	—	2
1	—	—	1	—	—	1	—	—	2	—	—	2
2	—	—	1	—	—	1	—	—	2	—	—	2
3	—	—	1	—	—	1	—	—	2	—	—	2
4	—	—	1	—	—	2	—	—	2	—	—	2
5	—	—	1	—	—	2	—	—	2	—	—	2
6	—	—	1	—	—	2	—	—	2	—	—	2
7	—	—	1	—	—	2	—	—	2	—	—	2
8	—	—	1	—	—	2	—	—	2	—	—	2
9	—	—	1	—	—	2	—	—	2	—	—	2
90	—	—	1	—	—	2	—	—	2	—	—	2
1	—	—	1	—	—	2	—	—	2	—	—	2
2	—	—	1	—	—	2	—	—	2	—	—	2
3	—	—	1	—	—	2	—	—	2	—	—	2
4	—	—	1	—	—	2	—	—	2	—	—	2
5	—	—	1	—	—	2	—	—	2	—	—	2
6	—	—	1	—	—	2	—	—	2	—	—	2
7	—	—	1	—	—	2	—	—	2	—	—	2
8	—	—	1	—	—	2	—	—	2	—	—	2
9	—	—	1	—	—	2	—	—	2	—	—	2
100	—	—	2	—	—	2	—	—	2	—	—	2
200	—	—	4	—	—	4	—	—	5	—	—	6
300	—	—	6	—	—	7	—	—	7	—	—	10
400	—	—	8	—	—	9	—	—	10	—	—	1
500	—	—	10	—	—	11	—	—	1	—	—	4
600	—	—	—	—	—	1	—	—	1	—	—	7
700	—	—	1	—	—	1	—	—	1	—	—	11
800	—	—	1	—	—	1	—	—	1	—	—	2
900	—	—	1	—	—	1	—	—	1	—	—	2
1000	—	—	1	—	—	1	—	—	2	—	—	2
2000	—	—	3	—	—	3	—	—	4	—	—	5

TWO DAYS.

365.

Lat.	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
66	—	—	2 1	—	—	2 2	—	—	3 —	—	—	3 3
7	—	—	2 1	—	—	2 2	—	—	3 —	—	—	3 3
8	—	—	2 1	—	—	2 2	—	—	3 —	—	—	3 3
9	—	—	2 1	—	—	2 2	—	—	3 —	—	—	3 3
60	—	—	2 1	—	—	2 3	—	—	3 1	—	—	4 —
1	—	—	2 1	—	—	2 3	—	—	3 1	—	—	4 —
2	—	—	2 1	—	—	2 3	—	—	3 1	—	—	4 —
3	—	—	2 1	—	—	2 3	—	—	3 1	—	—	4 1
4	—	—	2 2	—	—	2 3	—	—	3 1	—	—	4 1
5	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 1
6	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 1
7	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 2
8	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 2
9	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 2
70	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 2
1	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
2	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
3	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
4	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
5	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 —
6	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 —
7	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 —
8	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 —
9	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 1
80	—	—	3 —	—	—	3 3	—	—	4 1	—	—	5 1
1	—	—	3 —	—	—	3 3	—	—	4 1	—	—	5 1
2	—	—	3 1	—	—	3 3	—	—	4 1	—	—	5 1
3	—	—	3 1	—	—	3 3	—	—	4 1	—	—	5 2
4	—	—	3 1	—	—	3 3	—	—	4 1	—	—	5 2
5	—	—	3 1	—	—	3 3	—	—	4 2	—	—	5 2
6	—	—	3 1	—	—	4 —	—	—	4 2	—	—	5 2
7	—	—	3 1	—	—	4 —	—	—	4 2	—	—	5 3
8	—	—	3 1	—	—	4 —	—	—	4 2	—	—	5 3
9	—	—	3 2	—	—	4 —	—	—	4 2	—	—	5 3
90	—	—	3 2	—	—	4 —	—	—	4 3	—	—	6 —
1	—	—	3 2	—	—	4 —	—	—	4 3	—	—	6 —
2	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6 —
3	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6 —
4	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6 —
5	—	—	3 3	—	—	4 1	—	—	5 —	—	—	6 1
6	—	—	3 3	—	—	4 1	—	—	5 —	—	—	6 1
7	—	—	3 3	—	—	4 2	—	—	5 —	—	—	6 1
8	—	—	3 3	—	—	4 2	—	—	5 —	—	—	6 1
9	—	—	3 3	—	—	4 2	—	—	5 —	—	—	6 2
100	—	—	4 —	—	—	4 2	—	—	5 1	—	—	6 2
200	—	—	8 —	—	—	9 1	—	—	10 2	—	—	11 2
300	—	1	—	—	1	1 3	—	1	3 3	—	1	7 2
400	—	1	3 3	—	1	6 1	—	1	9 —	—	2	2 3
500	—	1	7 3	—	1	11 —	—	2	2 1	—	2	9 3
600	—	1	11 3	—	2	3 2	—	2	7 2	—	3	3 3
700	—	2	3 2	—	2	8 1	—	3	— 3	—	3	10 3
800	—	2	7 2	—	3	— 3	—	3	6 —	—	4	4 —
900	—	2	11 2	—	3	5 2	—	3	11 1	—	4	11 —
1000	—	3	3 2	—	3	10 —	—	4	4 2	—	5	5 —
2000	—	6	7 —	—	7	8 —	—	8	9 1	—	10	11 —

THREE DAYS.

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	I	—	—	I
4	—	—	I	—	—	I	—	—	I	—	—	I
5	—	—	I	—	—	I	—	—	I	—	—	I
6	—	—	I	—	—	I	—	—	I	—	—	I
7	—	—	I	—	—	2	—	—	2	—	—	2
8	—	—	I	—	—	2	—	—	2	—	—	2
9	—	—	2	—	—	2	—	—	2	—	—	3
10	—	—	2	—	—	2	—	—	3	—	—	I
11	—	—	2	—	—	3	—	—	3	—	—	I
12	—	—	2	—	—	3	—	—	3	—	—	I
13	—	—	3	—	—	I 3	—	—	I —	—	—	I I
14	—	—	3	—	—	I —	—	—	I —	—	—	I I
15	—	—	3	—	—	I —	—	—	I —	—	—	I 2
16	—	—	3	—	—	I —	—	—	I I	—	—	I 2
17	—	I	—	—	—	I —	—	—	I I	—	—	I 2
18	—	I	—	—	—	I I	—	—	I I	—	—	I 3
19	—	I	—	—	—	I I	—	—	I 2	—	—	I 3
20	—	I	—	—	—	I I	—	—	I 2	—	—	2 —
1	—	I	I	—	—	I I	—	—	I 2	—	—	2 —
2	—	I	I	—	—	I 2	—	—	I 3	—	—	2 —
3	—	I	I	—	—	I 2	—	—	I 3	—	—	2 I
4	—	I	I	—	—	I 2	—	—	I 3	—	—	2 I
5	—	I	2	—	—	I 2	—	—	2 —	—	—	2 I
6	—	I	2	—	—	I 3	—	—	2 —	—	—	2 2
7	—	I	2	—	—	I 3	—	—	2 —	—	—	2 2
8	—	I	2	—	—	2 3	—	—	2 I	—	—	2 3
9	—	I	2	—	—	2 —	—	—	2 I	—	—	2 3
30	—	I	3	—	—	2 —	—	—	2 I	—	—	2 3
1	—	I	3	—	—	2 —	—	—	2 I	—	—	3 —
2	—	I	3	—	—	2 —	—	—	2 2	—	—	3 —
3	—	I	3	—	—	2 I	—	—	2 2	—	—	3 I
4	—	2	—	—	—	2 I	—	—	2 2	—	—	3 I
5	—	2	—	—	—	2 I	—	—	2 3	—	—	3 2
6	—	2	—	—	—	2 2	—	—	2 3	—	—	3 2
7	—	2	—	—	—	2 2	—	—	2 3	—	—	3 2
8	—	2	I	—	—	2 2	—	—	3 —	—	—	3 3
9	—	2	I	—	—	2 2	—	—	3 —	—	—	3 3
40	—	2	I	—	—	2 3	—	—	3 —	—	—	4 —
1	—	2	I	—	—	2 3	—	—	3 I	—	—	4 —
2	—	2	2	—	—	2 3	—	—	3 I	—	—	4 —
3	—	2	2	—	—	3 3	—	—	3 I	—	—	4 I
4	—	2	2	—	—	3 —	—	—	3 2	—	—	4 I
5	—	2	2	—	—	3 —	—	—	3 2	—	—	4 2
6	—	2	3	—	—	3 —	—	—	3 2	—	—	4 2
7	—	2	3	—	—	3 I	—	—	3 3	—	—	4 3
8	—	2	3	—	—	3 I	—	—	3 3	—	—	4 3
9	—	2	3	—	—	3 I	—	—	3 3	—	—	4 3
50	—	3	—	—	—	3 I	—	—	4 —	—	—	5 —
1	—	3	—	—	—	3 2	—	—	4 —	—	—	5 —
2	—	3	—	—	—	3 2	—	—	4 —	—	—	5 —
3	—	3	—	—	—	3 2	—	—	4 —	—	—	5 I
4	—	3	—	—	—	3 2	—	—	4 I	—	—	5 I
5	—	3	I	—	—	3 3	—	—	4 I	—	—	5 2

Lat	3
56	-
7	-
8	-
9	-
60	-
1	-
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
70	-
1	-
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
80	-
1	-
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
90	-
1	-
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
100	-
200	-
300	-
400	-
500	-
600	-
700	-
800	-
900	-
1000	-
2000	-

THREE DAYS.

367

Lat	3 per Cent.			3 ½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	3 1	—	—	3 3	—	—	4 1	—	—	5 2
7	—	—	3 1	—	—	3 3	—	—	4 2	—	—	5 2
8	—	—	3 1	—	—	4 —	—	—	4 2	—	—	5 3
9	—	—	3 2	—	—	4 —	—	—	4 2	—	—	5 3
60	—	—	3 2	—	—	4 —	—	—	4 3	—	—	5 3
1	—	—	3 2	—	—	4 —	—	—	4 3	—	—	6 —
2	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6 —
3	—	—	3 3	—	—	4 1	—	—	5 —	—	—	6 1
4	—	—	3 3	—	—	4 1	—	—	5 —	—	—	6 1
5	—	—	3 3	—	—	4 2	—	—	5 —	—	—	6 1
6	—	—	3 3	—	—	4 2	—	—	5 1	—	—	6 2
7	—	—	4 —	—	—	4 2	—	—	5 1	—	—	6 2
8	—	—	4 —	—	—	4 2	—	—	5 1	—	—	6 2
9	—	—	4 —	—	—	4 3	—	—	5 2	—	—	6 3
70	—	—	4 —	—	—	4 3	—	—	5 2	—	—	6 3
1	—	—	4 —	—	—	4 3	—	—	5 2	—	—	7 —
2	—	—	4 1	—	—	5 —	—	—	5 3	—	—	7 —
3	—	—	4 1	—	—	5 —	—	—	5 3	—	—	7 1
4	—	—	4 1	—	—	5 —	—	—	5 3	—	—	7 1
5	—	—	4 1	—	—	5 —	—	—	5 3	—	—	7 1
6	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 2
7	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 2
8	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 2
9	—	—	4 2	—	—	5 2	—	—	6 1	—	—	7 3
80	—	—	4 3	—	—	5 2	—	—	6 1	—	—	8 —
1	—	—	4 3	—	—	5 2	—	—	6 1	—	—	8 —
2	—	—	4 3	—	—	5 2	—	—	6 2	—	—	8 —
3	—	—	4 3	—	—	5 3	—	—	6 2	—	—	8 1
4	—	—	5 —	—	—	5 3	—	—	6 2	—	—	8 1
5	—	—	5 —	—	—	5 3	—	—	6 2	—	—	8 1
6	—	—	5 —	—	—	5 3	—	—	6 3	—	—	8 2
7	—	—	5 —	—	—	6 —	—	—	6 3	—	—	8 2
8	—	—	5 —	—	—	6 —	—	—	6 3	—	—	8 3
9	—	—	5 1	—	—	6 —	—	—	7 —	—	—	8 3
90	—	—	5 1	—	—	6 1	—	—	7 —	—	—	9 —
1	—	—	5 1	—	—	6 1	—	—	7 —	—	—	9 —
2	—	—	5 1	—	—	6 1	—	—	7 1	—	—	9 —
3	—	—	5 2	—	—	6 1	—	—	7 1	—	—	9 1
4	—	—	5 2	—	—	6 2	—	—	7 1	—	—	9 1
5	—	—	5 2	—	—	6 2	—	—	7 2	—	—	9 1
6	—	—	5 2	—	—	6 2	—	—	7 2	—	—	9 2
7	—	—	5 3	—	—	6 3	—	—	7 2	—	—	9 2
8	—	—	5 3	—	—	6 3	—	—	7 3	—	—	9 3
9	—	—	5 3	—	—	6 3	—	—	7 3	—	—	9 3
100	—	—	6 —	—	—	7 —	—	—	8 —	—	—	10 —
200	—	—	11 3	—	1	1 3	—	—	11 3	—	—	17 3
300	—	1	5 3	—	1	8 3	—	—	11 2	—	—	5 2
400	—	1	11 3	—	2	3 2	—	—	2 7 2	—	—	3 3 2
500	—	2	5 2	—	2	10 1	—	—	3 3 2	—	—	4 1 1
600	—	2	11 2	—	3	5 1	—	—	3 11 2	—	—	4 11 1
700	—	3	5 2	—	4	— 1	—	—	4 7 1	—	—	5 9 —
800	—	3	11 2	—	4	7 1	—	—	5 3 1	—	—	6 7 —
900	—	4	5 1	—	5	2 —	—	—	5 11 —	—	—	7 4 3
1000	—	4	11 —	—	5	9 —	—	—	6 7 —	—	—	8 2 2
2000	—	9	10 1	—	11	6 —	—	—	13 1 3	—	—	16 5 1

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	1	—	—	—
3	—	—	1	—	—	1	—	—	1	—	—	1
4	—	—	1	—	—	1	—	—	1	—	—	2
5	—	—	1	—	—	2	—	—	2	—	—	2
6	—	—	2	—	—	2	—	—	2	—	—	3
7	—	—	2	—	—	2	—	—	3	—	—	3
8	—	—	2	—	—	3	—	—	3	—	—	4
9	—	—	3	—	—	3	—	—	1	—	—	1
10	—	—	3	—	—	3	—	—	1	—	—	1
11	—	—	3	—	—	1	—	—	1	—	—	1
12	—	—	1	—	—	1	—	—	1	1	—	1
13	—	—	1	—	—	1	1	—	1	1	—	1
14	—	—	1	—	—	1	1	—	1	2	—	1
15	—	—	1	1	—	1	1	—	1	2	—	2
16	—	—	1	1	—	1	2	—	1	3	—	2
17	—	—	1	1	—	1	2	—	1	3	—	2
18	—	—	1	1	—	1	3	—	1	3	—	2
19	—	—	1	2	—	1	3	—	2	—	—	2
20	—	—	1	2	—	1	3	—	2	—	—	2
1	—	—	1	2	—	2	—	—	2	1	—	2
2	—	—	1	3	—	2	—	—	2	1	—	2
3	—	—	1	3	—	2	—	—	2	2	—	3
4	—	—	1	3	—	2	1	—	2	2	—	3
5	—	—	2	—	—	2	1	—	2	3	—	3
6	—	—	2	—	—	2	2	—	2	3	—	3
7	—	—	2	—	—	2	2	—	2	3	—	3
8	—	—	2	—	—	2	2	—	3	—	—	4
9	—	—	2	1	—	2	3	—	3	—	—	4
10	—	—	2	1	—	2	3	—	3	1	—	4
1	—	—	2	1	—	2	3	—	3	1	—	4
2	—	—	2	2	—	3	—	—	3	1	—	4
3	—	—	2	2	—	3	—	—	3	2	—	4
4	—	—	2	2	—	3	—	—	3	2	—	4
5	—	—	2	3	—	3	1	—	3	3	—	4
6	—	—	2	3	—	3	1	—	3	3	—	4
7	—	—	2	3	—	3	2	—	3	3	—	4
8	—	—	3	—	—	3	2	—	4	—	—	5
9	—	—	3	—	—	3	2	—	4	—	—	5
10	—	—	3	—	—	3	3	—	4	1	—	5
1	—	—	3	—	—	3	3	—	4	1	—	5
2	—	—	3	1	—	3	3	—	4	2	—	5
3	—	—	3	1	—	4	—	—	4	2	—	5
4	—	—	3	1	—	4	—	—	4	3	—	5
5	—	—	3	2	—	4	1	—	4	3	—	5
6	—	—	3	2	—	4	1	—	4	3	—	6
7	—	—	3	2	—	4	1	—	5	—	—	6
8	—	—	3	3	—	4	2	—	5	—	—	6
9	—	—	3	3	—	4	2	—	5	1	—	6
10	—	—	4	—	—	4	3	—	5	1	—	6
1	—	—	4	—	—	4	3	—	5	2	—	6
2	—	—	4	—	—	4	3	—	5	2	—	6
3	—	—	4	1	—	5	—	—	5	2	—	6
4	—	—	4	1	—	5	—	—	5	3	—	7
5	—	—	4	1	—	5	—	—	5	3	—	7

FOUR DAYS.

359

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 1
7	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 2
8	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 2
9	—	—	4 3	—	—	5 2	—	—	6 1	—	—	7 3
60	—	—	4 3	—	—	5 2	—	—	6 1	—	—	7 3
1	—	—	4 3	—	—	5 2	—	—	6 1	—	—	8 —
2	—	—	4 3	—	—	5 3	—	—	6 2	—	—	8 1
3	—	—	5 —	—	—	5 3	—	—	6 2	—	—	8 1
4	—	—	5 —	—	—	5 3	—	—	6 3	—	—	8 1
5	—	—	5 —	—	—	6 —	—	—	6 3	—	—	8 2
6	—	—	5 1	—	—	6 —	—	—	7 —	—	—	8 2
7	—	—	5 1	—	—	6 —	—	—	7 —	—	—	8 3
8	—	—	5 1	—	—	6 1	—	—	7 —	—	—	8 3
9	—	—	5 2	—	—	6 1	—	—	7 1	—	—	9 —
70	—	—	5 2	—	—	6 2	—	—	7 1	—	—	9 —
1	—	—	5 2	—	—	6 2	—	—	7 2	—	—	9 1
2	—	—	5 3	—	—	6 2	—	—	7 2	—	—	9 1
3	—	—	5 3	—	—	6 3	—	—	7 2	—	—	9 2
4	—	—	5 3	—	—	6 3	—	—	7 3	—	—	9 2
5	—	—	5 3	—	—	7 —	—	—	7 3	—	—	9 3
6	—	—	6 —	—	—	7 —	—	—	8 —	—	—	10 —
7	—	—	6 —	—	—	7 —	—	—	8 —	—	—	10 —
8	—	—	6 —	—	—	7 1	—	—	8 1	—	—	10 1
9	—	—	6 1	—	—	7 1	—	—	8 1	—	—	10 2
80	—	—	6 1	—	—	7 1	—	—	8 2	—	—	10 2
1	—	—	6 1	—	—	7 2	—	—	8 2	—	—	10 2
2	—	—	6 2	—	—	7 2	—	—	8 3	—	—	10 3
3	—	—	6 2	—	—	7 2	—	—	8 3	—	—	10 3
4	—	—	6 2	—	—	7 3	—	—	8 3	—	—	11 —
5	—	—	6 3	—	—	7 3	—	—	9 —	—	—	11 —
6	—	—	6 3	—	—	8 —	—	—	9 —	—	—	11 1
7	—	—	6 3	—	—	8 —	—	—	9 —	—	—	11 1
8	—	—	6 3	—	—	8 —	—	—	9 1	—	—	11 2
9	—	—	7 —	—	—	8 1	—	—	9 1	—	—	11 2
90	—	—	7 —	—	—	8 1	—	—	9 2	—	—	11 3
1	—	—	7 —	—	—	8 1	—	—	9 2	—	—	11 3
2	—	—	7 1	—	—	8 2	—	—	9 2	—	—	11 3
3	—	—	7 1	—	—	8 2	—	—	9 3	—	—	11 3
4	—	—	7 1	—	—	8 2	—	—	9 3	—	—	11 3
5	—	—	7 2	—	—	8 3	—	—	10 —	—	—	11 3
6	—	—	7 2	—	—	8 3	—	—	10 —	—	—	11 3
7	—	—	7 2	—	—	8 3	—	—	10 1	—	—	11 3
8	—	—	7 3	—	—	9 —	—	—	10 1	—	—	11 3
9	—	—	7 3	—	—	9 —	—	—	10 1	—	—	11 3
100	—	—	7 3	—	—	9 1	—	—	10 2	—	—	11 3
200	—	1	3 3	—	1	6 2	—	1	9 —	—	2	2 1
300	—	1	11 2	—	2	3 2	—	2	7 2	—	3	3 1
400	—	2	7 2	—	3	— 3	—	3	6 —	—	4	4 2
500	—	3	3 2	—	3	10 —	—	4	4 2	—	5	5 3
600	—	3	11 1	—	4	7 1	—	5	3 —	—	6	7 —
700	—	4	7 1	—	5	4 2	—	6	1 2	—	7	8 —
800	—	5	3 —	—	6	1 2	—	7	10 2	—	8	9 1
900	—	5	11 —	—	6	10 3	—	7	10 2	—	9	10 1
1000	—	6	7 —	—	7	8 —	—	8	9 1	—	10	11 2
2000	—	13	3 3	—	15	4 —	—	17	6 1	—	3	1 11 2

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.			L. at
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	
1	—	—	—	—	—	—	—	—	—	—	—	—	56
2	—	—	—	—	—	1	—	—	1	—	—	—	7
3	—	—	1	—	—	1	—	—	1	—	—	—	8
4	—	—	1	—	—	2	—	—	2	—	—	—	9
5	—	—	2	—	—	2	—	—	2	—	—	—	60
6	—	—	2	—	—	3	—	—	3	—	—	—	1
7	—	—	2	—	—	3	—	—	3	—	—	—	2
8	—	—	3	—	—	1	—	—	1	—	—	—	3
9	—	—	3	—	—	1	—	—	1	—	—	—	4
10	—	—	1	—	—	1	—	—	1	—	—	—	5
11	—	—	1	—	—	1	—	—	1	—	—	—	6
12	—	—	1	—	—	1	—	—	1	—	—	—	7
13	—	—	1	—	—	1	—	—	1	—	—	—	8
14	—	—	1	—	—	1	—	—	1	—	—	—	9
15	—	—	1	—	—	1	—	—	2	—	—	—	70
16	—	—	1	—	—	1	—	—	2	—	—	—	1
17	—	—	1	—	—	2	—	—	2	—	—	—	2
18	—	—	1	—	—	2	—	—	2	—	—	—	3
19	—	—	1	—	—	2	—	—	2	—	—	—	4
20	—	—	2	—	—	2	—	—	2	—	—	—	5
1	—	—	2	—	—	2	—	—	2	—	—	—	6
2	—	—	2	—	—	2	—	—	3	—	—	—	7
3	—	—	2	—	—	2	—	—	3	—	—	—	8
4	—	—	2	—	—	2	—	—	3	—	—	—	9
5	—	—	2	—	—	2	—	—	3	—	—	—	80
6	—	—	2	—	—	3	—	—	3	—	—	—	1
7	—	—	2	—	—	3	—	—	3	—	—	—	2
8	—	—	2	—	—	3	—	—	3	—	—	—	3
9	—	—	2	—	—	3	—	—	3	—	—	—	4
10	—	—	3	—	—	3	—	—	4	—	—	—	5
1	—	—	3	—	—	3	—	—	4	—	—	—	6
2	—	—	3	—	—	3	—	—	4	—	—	—	7
3	—	—	3	—	—	3	—	—	4	—	—	—	8
4	—	—	3	—	—	4	—	—	4	—	—	—	9
5	—	—	3	—	—	4	—	—	4	—	—	—	90
6	—	—	3	—	—	4	—	—	4	—	—	—	1
7	—	—	3	—	—	4	—	—	4	—	—	—	2
8	—	—	3	—	—	4	—	—	5	—	—	—	3
9	—	—	3	—	—	4	—	—	5	—	—	—	4
10	—	—	4	—	—	4	—	—	5	—	—	—	5
1	—	—	4	—	—	4	—	—	5	—	—	—	6
2	—	—	4	—	—	4	—	—	5	—	—	—	7
3	—	—	4	—	—	5	—	—	5	—	—	—	8
4	—	—	4	—	—	5	—	—	5	—	—	—	9
5	—	—	4	—	—	5	—	—	6	—	—	—	100
6	—	—	4	—	—	5	—	—	6	—	—	—	200
7	—	—	4	—	—	5	—	—	6	—	—	—	300
8	—	—	4	—	—	5	—	—	6	—	—	—	400
9	—	—	4	—	—	5	—	—	6	—	—	—	500
10	—	—	5	—	—	5	—	—	6	—	—	—	600
1	—	—	5	—	—	5	—	—	6	—	—	—	700
2	—	—	5	—	—	6	—	—	6	—	—	—	800
3	—	—	5	—	—	6	—	—	7	—	—	—	900
4	—	—	5	—	—	6	—	—	7	—	—	—	1000
5	—	—	5	—	—	6	—	—	7	—	—	—	2000

FIVE DAYS.

371

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	5 2	—	—	6 2	—	—	7 1	—	—	9 1
7	—	—	5 2	—	—	6 2	—	—	7 2	—	—	9 1
8	—	—	5 3	—	—	6 3	—	—	7 2	—	—	9 2
9	—	—	5 3	—	—	6 3	—	—	7 3	—	—	9 3
60	—	—	5 3	—	—	7 —	—	—	7 3	—	—	9 3
1	—	—	6 —	—	—	7 —	—	—	8 —	—	—	10 —
2	—	—	6 —	—	—	7 1	—	—	8 —	—	—	10 1
3	—	—	6 —	—	—	7 1	—	—	8 1	—	—	10 1
4	—	—	6 1	—	—	7 1	—	—	8 1	—	—	10 2
5	—	—	6 1	—	—	7 2	—	—	8 2	—	—	10 2
6	—	—	6 2	—	—	7 2	—	—	8 2	—	—	10 3
7	—	—	6 2	—	—	7 3	—	—	8 3	—	—	11 —
8	—	—	6 2	—	—	7 3	—	—	8 3	—	—	11 —
9	—	—	6 3	—	—	8 —	—	—	9 —	—	—	11 1
70	—	—	6 3	—	—	8 —	—	—	9 —	—	—	11 2
1	—	—	7 —	—	—	8 1	—	—	9 1	—	—	11 2
2	—	—	7 —	—	—	8 1	—	—	9 1	—	—	11 3
3	—	—	7 —	—	—	8 2	—	—	9 2	—	—	11 —
4	—	—	7 1	—	—	8 2	—	—	9 2	—	—	11 —
5	—	—	7 1	—	—	8 3	—	—	9 3	—	—	11 1
6	—	—	7 2	—	—	8 3	—	—	10 —	—	—	11 2
7	—	—	7 2	—	—	8 3	—	—	10 —	—	—	11 2
8	—	—	7 2	—	—	9 —	—	—	10 1	—	—	11 3
9	—	—	7 3	—	—	9 —	—	—	10 1	—	—	11 1
80	—	—	7 3	—	—	9 1	—	—	10 2	—	—	11 1
1	—	—	8 —	—	—	9 1	—	—	10 2	—	—	11 1
2	—	—	8 —	—	—	9 2	—	—	10 3	—	—	11 2
3	—	—	8 —	—	—	9 2	—	—	10 3	—	—	11 2
4	—	—	8 1	—	—	9 3	—	—	11 —	—	—	11 3
5	—	—	8 1	—	—	9 3	—	—	11 —	—	—	11 3
6	—	—	8 2	—	—	10 —	—	—	11 1	—	—	12 —
7	—	—	8 2	—	—	10 —	—	—	11 1	—	—	12 1
8	—	—	8 2	—	—	10 1	—	—	11 2	—	—	12 2
9	—	—	8 3	—	—	10 1	—	—	11 2	—	—	12 2
90	—	—	8 3	—	—	10 1	—	—	11 3	—	—	12 3
1	—	—	9 —	—	—	10 2	—	—	11 3	—	—	12 3
2	—	—	9 —	—	—	10 2	—	—	11 3	—	—	12 3
3	—	—	9 —	—	—	10 3	—	—	11 —	—	—	12 4
4	—	—	9 1	—	—	10 3	—	—	11 —	—	—	12 4
5	—	—	9 1	—	—	11 —	—	—	11 —	—	—	13 1
6	—	—	9 2	—	—	11 —	—	—	11 —	—	—	13 2
7	—	—	9 2	—	—	11 1	—	—	11 —	—	—	13 3
8	—	—	9 2	—	—	11 1	—	—	11 —	—	—	13 3
9	—	—	9 3	—	—	11 2	—	—	11 1	—	—	13 4
100	—	—	9 3	—	—	11 2	—	—	11 1	—	—	13 4
200	—	1	7 3	—	1	11 —	—	2	2 1	—	2	8 3
300	—	2	5 2	—	2	10 2	—	3	3 1/2	—	4	1 1
400	—	3	3 2	—	3	10 —	—	4	4 2	—	5	5 2
500	—	4	1 1	—	4	9 2	—	5	5 3	—	6	10 —
600	—	4	11 1	—	5	9 —	—	6	6 3	—	8	2 2
700	—	5	9 —	—	6	8 2	—	7	8 —	—	9	7 —
800	—	6	7 —	—	7	8 —	—	8	9 1	—	10	11 2
900	—	7	4 3	—	8	7 2	—	9	10 1	—	12	4 —
1000	—	8	2 2	—	9	7 —	—	10	11 2	—	13	8 2
2000	—	16	4 1	—	19	2 1	—	1	11 —	—	1	7 4 3

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.			L. at
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	
1	—	—	—	—	—	—	—	—	—	—	—	—	56
2	—	—	1	—	—	1	—	—	1	—	—	1	7
3	—	—	1	—	—	1	—	—	2	—	—	2	8
4	—	—	2	—	—	2	—	—	2	—	—	3	9
5	—	—	2	—	—	2	—	—	3	—	—	1	60
6	—	—	3	—	—	3	—	—	1	—	—	1	1
7	—	—	3	—	—	1	—	—	1	—	—	1	2
8	—	—	3	—	—	1	—	—	1	1	—	1	3
9	—	—	1	—	—	1	1	—	1	1	—	1	4
10	—	—	1	—	—	1	1	—	1	2	—	2	5
11	—	—	1	1	—	1	2	—	1	3	—	2	6
12	—	—	1	1	—	1	2	—	1	3	—	2	7
13	—	—	1	2	—	1	3	—	2	—	—	2	8
14	—	—	1	2	—	2	—	—	2	—	—	2	9
15	—	—	1	3	—	2	—	—	2	1	—	3	70
16	—	—	1	3	—	2	1	—	2	2	—	3	1
17	—	—	2	—	—	2	1	—	2	2	—	3	2
18	—	—	2	—	—	2	2	—	2	3	—	3	3
19	—	—	2	1	—	2	3	—	3	—	—	3	4
20	—	—	2	1	—	2	3	—	3	—	—	4	5
1	—	—	2	2	—	3	—	—	3	1	—	4	6
2	—	—	2	2	—	3	—	—	3	1	—	4	7
3	—	—	2	2	—	3	1	—	3	2	—	4	8
4	—	—	2	3	—	3	1	—	3	3	—	4	9
5	—	—	2	3	—	3	2	—	3	3	—	5	8
6	—	—	3	—	—	3	2	—	4	—	—	5	
7	—	—	3	—	—	3	3	—	4	1	—	5	1
8	—	—	3	1	—	3	3	—	4	1	—	5	2
9	—	—	3	1	—	4	—	—	4	2	—	5	3
10	—	—	3	2	—	4	—	—	4	2	—	6	
1	—	—	3	2	—	4	1	—	4	3	—	6	
2	—	—	3	3	—	4	1	—	5	—	—	6	1
3	—	—	3	3	—	4	2	—	5	—	—	6	2
4	—	—	4	—	—	4	3	—	5	1	—	6	3
5	—	—	4	—	—	4	3	—	5	2	—	7	
6	—	—	4	1	—	5	—	—	5	2	—	7	
7	—	—	4	1	—	5	—	—	5	3	—	7	1
8	—	—	4	2	—	5	1	—	6	—	—	7	2
9	—	—	4	2	—	5	1	—	6	—	—	7	3
10	—	—	4	3	—	5	2	—	6	1	—	7	3
1	—	—	4	3	—	5	3	—	6	2	—	8	
2	—	—	5	—	—	5	3	—	6	2	—	8	1
3	—	—	5	—	—	6	—	—	6	3	—	8	2
4	—	—	5	—	—	6	—	—	7	—	—	8	3
5	—	—	5	1	—	6	1	—	7	—	—	9	
6	—	—	5	1	—	6	1	—	7	1	—	9	
7	—	—	5	2	—	6	2	—	7	2	—	9	1
8	—	—	5	2	—	6	2	—	7	2	—	9	2
9	—	—	5	3	—	6	3	—	7	3	—	9	3
10	—	—	5	3	—	7	—	—	8	—	—	9	3
1	—	—	6	—	—	7	—	—	8	—	—	10	
2	—	—	6	—	—	7	1	—	8	1	—	10	1
3	—	—	6	1	—	7	1	—	8	2	—	10	2
4	—	—	6	1	—	7	2	—	8	2	—	10	3
5	—	—	6	2	—	7	2	—	8	3	—	10	3

SIX DAYS.

373

Lat	3 per Cent.		3 1/2 p. Cent.		4 per Cent.		5 per Cent.	
	l. s.	d. f.	l. s.	d. f.	l. s.	d. f.	l. s.	d. f.
56	—	6 2	—	7 3	—	9 —	—	11 —
57	—	6 3	—	7 3	—	9 —	—	11 1
58	—	6 3	—	8 —	—	9 1	—	11 2
59	—	7 —	—	8 1	—	9 2	—	11 2
60	—	7 —	—	8 1	—	9 2	—	11 3
1	—	7 1	—	8 2	—	9 3	—	11 —
2	—	7 1	—	8 2	—	9 3	—	11 —
3	—	7 2	—	8 3	—	10 —	—	11 2
4	—	7 2	—	8 3	—	10 —	—	11 3
5	—	7 3	—	9 —	—	10 1	—	11 3
6	—	7 3	—	9 —	—	10 1	—	11 —
7	—	8 —	—	9 1	—	10 2	—	11 1
8	—	8 —	—	9 1	—	10 3	—	11 2
9	—	8 1	—	9 2	—	10 3	—	11 3
70	—	8 1	—	9 2	—	11 —	—	11 3
1	—	8 2	—	9 3	—	11 —	—	12 —
2	—	8 2	—	9 3	—	11 1	—	12 1
3	—	8 3	—	10 —	—	11 1	—	12 2
4	—	8 3	—	10 1	—	11 2	—	12 2
5	—	9 —	—	10 1	—	11 3	—	12 3
6	—	9 —	—	10 2	—	11 —	—	13 —
7	—	9 1	—	10 2	—	11 —	1 —	13 —
8	—	9 1	—	10 3	—	11 —	1 —	13 1
9	—	9 1	—	10 3	—	11 —	2 —	13 2
80	—	9 2	—	11 —	—	11 —	2 —	13 3
1	—	9 2	—	11 —	—	11 —	3 —	14 —
2	—	9 3	—	11 1	—	11 —	3 —	14 1
3	—	9 3	—	11 1	—	11 1	—	14 1
4	—	10 —	—	11 2	—	11 1	—	14 2
5	—	10 —	—	11 3	—	11 1	—	14 3
6	—	10 1	—	11 3	—	11 2	—	15 —
7	—	10 1	—	11 —	—	11 2	—	15 1
8	—	10 2	—	11 —	—	11 3	—	15 1
9	—	10 2	—	11 —	1 —	11 2	—	15 2
90	—	10 3	—	11 —	1 —	11 2	—	15 3
1	—	10 3	—	11 —	2 —	11 2	—	16 —
2	—	11 —	—	11 —	2 —	11 2	—	16 1
3	—	11 1	—	11 —	3 —	11 2	—	16 2
4	—	11 1	—	11 1	—	11 3	—	16 3
5	—	11 2	—	11 1	—	11 3	—	17 —
6	—	11 2	—	11 1	—	11 3	—	17 —
7	—	11 2	—	11 1	—	11 3	—	17 1
8	—	11 3	—	11 2	—	11 3	—	17 2
9	—	11 3	—	11 2	—	11 3	—	17 3
100	—	1 —	—	11 3	—	11 3	—	18 3
200	—	1 11 3	—	2 3 2	—	2 7 2	—	3 3 2
300	—	2 11 2	—	3 5 2	—	3 11 1	—	4 11 —
400	—	3 11 1	—	4 7 1	—	5 3 1	—	6 7 —
500	—	4 11 —	—	5 9 —	—	6 6 3	—	8 2 2
600	—	5 11 —	—	6 10 3	—	7 10 3	—	9 10 1
700	—	6 10 3	—	8 — 2	—	9 2 2	—	11 6 —
800	—	7 10 2	—	9 2 2	—	10 6 1	—	13 1 3
900	—	8 10 2	—	10 4 1	—	11 10 —	—	14 9 2
1000	—	9 10 2	—	11 6 —	—	12 1 3	—	16 5 1
2000	—	19 8 3	—	1 3 —	—	1 6 3 2	—	1 12 10 2

SEVEN DAYS.

375

L. at	3 per Cent.			3 ½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	7 3	—	—	9 —	—	—	10 2	—	1 —	3
7	—	—	7 3	—	—	9 —	—	—	10 2	—	1 —	1
8	—	—	8 —	—	—	9 1	—	—	10 3	—	1 —	1
9	—	—	8 —	—	—	9 2	—	—	11 —	—	1 —	1
60	—	—	8 1	—	—	9 2	—	—	11 —	—	1 —	1
1	—	—	8 1	—	—	9 3	—	—	11 1	—	1 —	2
2	—	—	8 2	—	—	10 —	—	—	11 2	—	1 —	2
3	—	—	8 2	—	—	10 —	—	—	11 3	—	1 —	2
4	—	—	8 3	—	—	10 1	—	—	11 —	—	1 —	2
5	—	—	9 —	—	—	10 1	—	—	11 —	—	1 —	3
6	—	—	9 —	—	—	10 2	—	—	11 —	—	1 —	3
7	—	—	9 1	—	—	10 3	—	—	11 —	—	1 —	3
8	—	—	9 1	—	—	10 3	—	—	11 —	—	1 —	3
9	—	—	9 2	—	—	11 —	—	—	11 —	—	1 —	3
70	—	—	9 3	—	—	11 1	—	—	11 —	—	1 —	4
1	—	—	9 3	—	—	11 1	—	—	11 —	—	1 —	4
2	—	—	10 —	—	—	11 2	—	—	11 1	—	1 —	4
3	—	—	10 —	—	—	11 2	—	—	11 2	—	1 —	4
4	—	—	10 1	—	—	11 3	—	—	11 3	—	1 —	5
5	—	—	10 1	—	—	11 3	—	—	11 3	—	1 —	5
6	—	—	10 2	—	—	1 —	—	—	11 2	—	1 —	5
7	—	—	10 3	—	—	1 —	—	—	11 2	—	1 —	5
8	—	—	10 3	—	—	1 —	—	—	11 2	—	1 —	6
9	—	—	11 —	—	—	1 —	—	—	11 2	—	1 —	6
80	—	—	11 —	—	—	1 —	—	—	11 3	—	1 —	6
1	—	—	11 1	—	—	1 1	—	—	11 3	—	1 —	6
2	—	—	11 1	—	—	1 1	—	—	11 3	—	1 —	6
3	—	—	11 2	—	—	1 1 1	—	—	11 3	—	1 —	7
4	—	—	11 2	—	—	1 1 1	—	—	11 3	—	1 —	7
5	—	—	11 3	—	—	1 1 2	—	—	11 3	—	1 —	7
6	—	—	11 3	—	—	1 1 2	—	—	11 4	—	1 —	7
7	—	—	1 —	—	—	1 1 3	—	—	11 4	—	1 —	8
8	—	—	1 —	—	—	1 2 —	—	—	11 4	—	1 —	8
9	—	—	1 —	—	—	1 2 1	—	—	11 4	—	1 —	8
90	—	—	1 —	—	—	1 2 2	—	—	11 4	—	1 —	8
1	—	—	1 —	—	—	1 2 3	—	—	11 4	—	1 —	9
2	—	—	1 —	—	—	1 2 3	—	—	11 5	—	1 —	9
3	—	—	1 —	—	—	1 3 —	—	—	11 5	—	1 —	9
4	—	—	1 —	—	—	1 3 —	—	—	11 5	—	1 —	9
5	—	—	1 1 —	—	—	1 3 1	—	—	11 5	—	1 —	9
6	—	—	1 1 —	—	—	1 3 1	—	—	11 5	—	1 —	10
7	—	—	1 1 1	—	—	1 3 2	—	—	11 6	—	1 —	10
8	—	—	1 1 1	—	—	1 3 3	—	—	11 6	—	1 —	10
9	—	—	1 1 2	—	—	1 2 —	—	—	11 6	—	1 —	10
100	—	—	1 1 3	—	—	1 4 1	—	—	11 6	—	1 —	11
200	—	—	2 3 2	—	—	2 8 1	—	—	3 —	—	3 —	10
300	—	—	3 5 2	—	—	4 — 1	—	—	4 7 1	—	5 —	9
400	—	—	4 7 1	—	—	5 4 2	—	—	6 1 3	—	7 —	8
500	—	—	5 6 —	—	—	6 8 2	—	—	7 8 —	—	9 —	7
600	—	—	6 11 —	—	—	8 — 2	—	—	9 2 2	—	11 —	6
700	—	—	8 — 2	—	—	9 4 3	—	—	10 9 —	—	13 —	5
800	—	—	9 2 2	—	—	10 8 3	—	—	12 3 1	—	15 —	4
900	—	—	10 4 1	—	—	12 1 —	—	—	13 9 3	—	17 —	3
1000	—	—	11 6 —	—	—	13 5 —	—	—	15 4 1	—	19 —	2
2000	1	3	—	1	6	10 1	1	10	2 1	1	18	4

EIGHT DAYS.

Lat	3 per Cent.			3 1/2 per Cent.			4 per Cent.			5 per Cent.			Lat
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	
1			1			1			1			1	36
2			1			1			2			2	7
3			2			2			2			3	8
4			2			3			3			1	9
5			3			1			1			1	60
6			1			1			1			1	1
7			1			1			1			1	2
8			1			1			1			2	3
9			1			1			1			2	4
10			1			2			2			2	5
11			1			2			2			2	6
12			2			2			2			3	7
13			2			2			2			3	8
14			2			2			3			3	9
15			2			2			3			4	70
16			2			3			3			4	1
17			2			3			3			4	2
18			3			3			3			4	3
19			3			3			4			5	4
20			3			3			4			5	5
1			3			4			4			5	6
2			3			4			4			5	7
3			3			4			5			6	8
4			4			4			5			6	9
5			4			4			5			6	30
6			4			5			5			6	1
7			4			5			5			7	2
8			4			5			5			7	3
9			4			5			6			7	4
30			5			5			6			7	5
1			5			5			6			8	6
2			5			6			6			8	7
3			5			6			6			8	8
4			5			6			7			9	9
5			5			6			7			9	90
6			5			6			7			9	1
7			5			6			7			9	2
8			6			7			8			10	3
9			6			7			8			10	4
40			6			7			8			10	5
1			6			7			8			10	6
2			6			7			8			11	7
3			6			8			9			11	8
4			7			8			9			11	9
5			7			8			9			11	100
6			7			8			9			11	200
7			7			8			9			11	300
8			7			8			10			11	400
9			7			9			10			11	500
50			8			9			10			11	600
1			8			9			10			11	700
2			8			9			10			11	800
3			8			9			11			11	900
4			8			10			11			11	1000
5			8			10			11			11	2000

EIGHT DAYS.

377

Lat	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	9	—	—	10 1	—	—	11 3	—	1	2 3
7	—	—	9	—	—	10 2	—	1	—	—	1	3
8	—	—	9	1	—	10 3	—	1	—	—	1	3 1
9	—	—	9	2	—	10 3	—	1	—	1	1	3 2
60	—	—	9	2	—	11	—	1	—	1	1	3 3
1	—	—	9	3	—	11 1	—	1	—	3	—	4
2	—	—	9	3	—	11 2	—	1	1	—	1	4 1
3	—	—	10	—	—	11 2	—	1	1 1	—	1	4 2
4	—	—	10	—	—	11 3	—	1	1 2	—	1	4 3
5	—	—	10	1	—	1	—	1	1 2	—	1	5
6	—	—	10	2	—	1	—	1	1 3	—	1	5 2
7	—	—	10	3	—	1	—	1	2	—	1	5 3
8	—	—	10	3	—	1	—	2	2 1	—	1	6
9	—	—	11	—	—	1	—	3	2 2	—	1	6 1
70	—	—	11	—	—	1	—	3	2 3	—	1	6 2
1	—	—	11	1	—	1	1	—	3	—	1	6 3
2	—	—	11	2	—	1	1 1	—	3	1	—	7
3	—	—	11	2	—	1	1 2	—	3	1	—	7 1
4	—	—	11	3	—	1	1 2	—	3	2	—	7 2
5	—	—	11	3	—	1	1 3	—	3	3	—	7 3
6	—	—	11	3	—	1	2	—	4	—	1	8
7	—	—	1	—	—	1	2 1	—	4	1	—	8 1
8	—	—	1	—	—	1	2 1	—	4	2	—	8 2
9	—	—	1	—	—	1	2 2	—	4	2	—	8 3
80	—	—	1	—	—	1	2 3	—	4	3	—	9
1	—	—	1	—	—	1	3	—	5	—	1	9 1
2	—	—	1	1	—	1	3	—	5	1	—	9 2
3	—	—	1	1	—	1	3 1	—	5	2	—	10
4	—	—	1	1 1	—	1	3 2	—	5	3	—	10 1
5	—	—	1	1 2	—	1	3 3	—	5	3	—	10 2
6	—	—	1	1 2	—	1	3 3	—	6	—	—	10 3
7	—	—	1	1 3	—	1	4	—	6	1	—	11
8	—	—	1	2	—	1	4 1	—	6	2	—	11 1
9	—	—	1	2	—	1	4 2	—	6	2	—	11 2
90	—	—	1	2 1	—	1	4 2	—	7	—	—	11 3
1	—	—	1	2 1	—	1	4 3	—	7	—	2	—
2	—	—	1	2 2	—	1	5	—	7	1	—	2
3	—	—	1	2 3	—	1	5 1	—	7	2	—	2
4	—	—	1	3	—	1	5 1	—	7	3	—	3
5	—	—	1	3 1	—	1	5 2	—	8	—	2	1
6	—	—	1	3 1	—	1	5 3	—	8	1	—	2 1
7	—	—	1	3 2	—	1	6	—	8	1	—	2 1 2
8	—	—	1	3 2	—	1	6 1	—	8	2	—	2 1 3
9	—	—	1	3 3	—	1	6 1	—	8	3	—	2 2
100	—	—	1	3 3	—	1	6 2	—	9	—	2	2 1
200	—	—	2	7 2	—	3	—	3	6	—	4	4 2
300	—	—	3	11 1	—	4	7 1	—	5	3	—	6 3
400	—	—	5	3 1	—	6	1 2	—	7	—	8	9 1
500	—	—	6	7	—	7	8	—	8	9 1	—	10 11 2
600	—	—	6	10 3	—	9	2 2	—	10	6 1	—	13 1 3
700	—	—	9	2 2	—	10	9	—	12	3 1	—	15 4
800	—	—	10	6 1	—	12	3 1	—	14	—	—	17 6 1
900	—	—	11	10	—	13	9 3	—	15	9 2	—	19 8 3
1000	—	—	13	1 3	—	15	4	—	17	6 2	—	1 11
2000	—	—	1	6	3 3	1	10	8 1	1	15	—	3 10

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	1	—	—	1	—	—	1
2	—	—	1	—	—	2	—	—	2	—	—	2
3	—	—	2	—	—	2	—	—	2	—	—	3
4	—	—	3	—	—	3	—	—	3	—	—	1 1
5	—	—	3	—	—	1	—	—	1	—	—	1 2
6	—	—	1	—	—	1 1	—	—	1 1	—	—	1 3
7	—	—	1 1	—	—	1 2	—	—	1 2	—	—	2
8	—	—	1 2	—	—	1 2	—	—	1 3	—	—	2 1
9	—	—	1 2	—	—	1 3	—	—	2	—	—	2 2
10	—	—	1 3	—	—	2	—	—	2 1	—	—	3
11	—	—	2	—	—	2 1	—	—	2 2	—	—	3 1
12	—	—	2 1	—	—	2 2	—	—	2 3	—	—	3 2
13	—	—	2 1	—	—	2 3	—	—	3	—	—	3 3
14	—	—	2 2	—	—	3	—	—	3 1	—	—	4 1
15	—	—	2 3	—	—	3	—	—	3 2	—	—	4 2
16	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
17	—	—	3	—	—	3 2	—	—	4	—	—	5
18	—	—	3 1	—	—	3 3	—	—	4 1	—	—	5 1
19	—	—	3 2	—	—	4	—	—	4 2	—	—	5 2
20	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6
1	—	—	3 3	—	—	4 2	—	—	5	—	—	6 1
2	—	—	4	—	—	4 2	—	—	5 1	—	—	6 2
3	—	—	4	—	—	4 3	—	—	5 2	—	—	6 3
4	—	—	4 1	—	—	5	—	—	5 3	—	—	7 1
5	—	—	4 2	—	—	5 1	—	—	6	—	—	7 2
6	—	—	4 3	—	—	5 2	—	—	6 1	—	—	7 3
7	—	—	4 3	—	—	5 3	—	—	6 2	—	—	8
8	—	—	5	—	—	5 3	—	—	6 3	—	—	8 1
9	—	—	5 1	—	—	6	—	—	7	—	—	8 2
10	—	—	5 2	—	—	6 1	—	—	7	—	—	9
1	—	—	5 2	—	—	6 2	—	—	7 1	—	—	9 1
2	—	—	5 3	—	—	6 3	—	—	7 2	—	—	9 2
3	—	—	6	—	—	6 3	—	—	7 3	—	—	9 3
4	—	—	6 1	—	—	7	—	—	8	—	—	10 1
5	—	—	6 2	—	—	7 1	—	—	8 1	—	—	10 2
6	—	—	6 2	—	—	7 2	—	—	8 2	—	—	10 3
7	—	—	6 3	—	—	7 3	—	—	8 3	—	—	11
8	—	—	6 3	—	—	8	—	—	9	—	—	11 1
9	—	—	7	—	—	8 1	—	—	9 1	—	—	11 2
10	—	—	7 1	—	—	8 1	—	—	9 2	—	—	1
1	—	—	7 2	—	—	8 2	—	—	9 3	—	—	1
2	—	—	7 2	—	—	8 3	—	—	10	—	—	1
3	—	—	7 3	—	—	9	—	—	10 1	—	—	1
4	—	—	8	—	—	9 1	—	—	10 2	—	—	1
5	—	—	8 1	—	—	9 2	—	—	10 3	—	—	1 1
6	—	—	8 1	—	—	9 3	—	—	11	—	—	1 2
7	—	—	8 2	—	—	9 3	—	—	11 1	—	—	1 2
8	—	—	8 2	—	—	10	—	—	11 2	—	—	1 2
9	—	—	8 3	—	—	10 1	—	—	11 3	—	—	1 2
10	—	—	9	—	—	10 2	—	—	1	—	—	1 3
1	—	—	9 1	—	—	10 3	—	—	1	—	—	1 3
2	—	—	9 2	—	—	10 3	—	—	1	—	—	1 3
3	—	—	9 2	—	—	11	—	—	1	—	—	1 3
4	—	—	9 3	—	—	11 1	—	—	1	—	—	1 3
5	—	—	9 3	—	—	11 2	—	—	1	—	—	1 4

L. at	
56	
7	
8	
9	
60	
1	
2	
3	
4	
5	
6	
7	
8	
9	
70	
1	
2	
3	
4	
5	
6	
7	
8	
9	
80	
1	
2	
3	
4	
5	
6	
7	
8	
9	
90	
1	
2	
3	
4	
5	
6	
7	
8	
9	
100	
200	
300	
400	
500	
600	
700	
800	
900	
1000	
2000	

NINE DAYS.

379

Lat	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	36	—	10	—	—	11 2	—	1	1 1	—	1	4 2
2	7	—	10	—	—	11 3	—	1	1 2	—	1	4 3
3	8	—	10	—	—	—	—	1	1 3	—	1	5 —
1	9	—	10	—	—	1	—	1	2 —	—	1	5 1
2	60	—	10	—	—	2	—	1	2 1	—	1	5 3
3	1	—	11	—	—	2	—	1	2 2	—	1	6 —
—	2	—	11	—	—	3	—	1	2 3	—	1	6 1
1	3	—	11	—	—	1	—	1	3 —	—	1	6 2
2	4	—	11	—	—	1	—	1	3 1	—	1	6 3
3	5	—	11	—	—	1	—	1	3 2	—	1	7 —
1	6	—	11	—	—	1	—	1	3 3	—	1	7 2
2	7	—	1	—	—	1	—	1	4 —	—	1	7 3
3	8	—	1	—	—	2	—	1	4 1	—	1	8 —
1	9	—	1	—	—	2	—	1	4 2	—	1	8 1
2	70	—	1	—	—	2	—	1	4 2	—	1	8 3
3	1	—	1	—	—	3	—	1	4 3	—	1	9 —
—	2	—	1	—	—	3	—	1	5 —	—	1	9 1
1	3	—	1	—	—	3	—	1	5 1	—	1	9 2
2	4	—	1	—	—	3	—	1	5 2	—	1	9 3
3	5	—	1	—	—	3	—	1	5 3	—	1	10 —
1	6	—	1	—	—	3	—	1	6 —	—	1	10 2
2	7	—	1	—	—	4	—	1	6 1	—	1	10 3
3	8	—	1	—	—	4	—	1	6 2	—	1	11 —
1	9	—	1	—	—	4	—	1	6 3	—	1	11 1
2	80	—	1	—	—	4	—	1	7 —	—	1	11 3
3	1	—	1	—	—	4	—	1	7 1	—	2	—
—	2	—	1	—	—	5	—	1	7 2	—	2	—
1	3	—	1	—	—	5	—	1	7 3	—	2	—
2	4	—	1	—	—	5	—	1	8 —	—	2	—
3	5	—	1	—	—	5	—	1	8 1	—	2	—
1	6	—	1	—	—	5	—	1	8 2	—	2	—
2	7	—	1	—	—	6	—	1	8 3	—	2	—
3	8	—	1	—	—	6	—	1	9 —	—	2	—
1	9	—	1	—	—	6	—	1	9 1	—	2	—
2	90	—	1	—	—	6	—	1	9 1	—	2	—
3	1	—	1	—	—	6	—	1	9 2	—	2	—
—	2	—	1	—	—	6	—	1	9 3	—	2	—
1	3	—	1	—	—	7	—	1	10 —	—	2	—
2	4	—	1	—	—	7	—	1	10 1	—	2	—
3	5	—	1	—	—	7	—	1	10 2	—	2	—
1	6	—	1	—	—	7	—	1	10 3	—	2	—
2	7	—	1	—	—	8	—	1	11 —	—	2	—
3	8	—	1	—	—	8	—	1	11 1	—	2	—
1	9	—	1	—	—	8	—	1	11 2	—	2	—
2	90	—	1	—	—	8	—	1	11 3	—	2	—
3	1	—	1	—	—	8	—	1	11 3	—	2	—
—	2	—	1	—	—	9	—	1	11 1	—	4	—
1	300	—	4	—	—	5	—	1	11 —	—	7	—
2	400	—	5	—	—	6	—	1	10 3	—	9	—
3	500	—	7	—	—	8	—	1	10 1	—	12	—
1	600	—	8	—	—	10	—	1	10 —	—	14	—
2	700	—	10	—	—	12	—	1	9 3	—	17	—
3	800	—	11	—	—	13	—	1	9 2	—	19	—
1	900	—	13	—	—	15	—	1	9 —	—	1	—
2	1000	—	14	—	—	17	—	1	8 3	—	4	—
3	1000	—	9	—	—	14	—	2	19 5 2	—	9	—

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	1	—	—	1	—	—	1
2	—	—	1	—	—	2	—	—	2	—	—	2
3	—	—	2	—	—	3	—	—	3	—	—	1
4	—	—	3	—	—	1	—	—	1	—	—	1 1
5	—	—	1	—	—	1	—	—	1 1	—	—	1 2
6	—	—	1 1	—	—	1 1	—	—	1 2	—	—	2
7	—	—	1 1	—	—	1 2	—	—	1 3	—	—	2 1
8	—	—	1 2	—	—	1 3	—	—	2	—	—	2 2
9	—	—	1 3	—	—	2	—	—	2 1	—	—	2 3
10	—	—	2	—	—	2 1	—	—	2 2	—	—	3 1
11	—	—	2 1	—	—	2 2	—	—	2 3	—	—	3 2
12	—	—	2 1	—	—	2 3	—	—	3	—	—	3 3
13	—	—	2 2	—	—	3	—	—	3 1	—	—	4
14	—	—	2 3	—	—	3 1	—	—	3 2	—	—	4 2
15	—	—	3	—	—	3 2	—	—	3 3	—	—	4 3
16	—	—	3	—	—	3 3	—	—	4	—	—	5 1
17	—	—	3 1	—	—	4	—	—	4 2	—	—	5 2
18	—	—	3 2	—	—	4 1	—	—	4 3	—	—	5 3
19	—	—	3 3	—	—	4 2	—	—	5	—	—	6 1
20	—	—	4	—	—	4 3	—	—	5 1	—	—	6 2
1	—	—	4	—	—	4 3	—	—	5 2	—	—	6 3
2	—	—	4 1	—	—	5	—	—	5 3	—	—	7 1
3	—	—	4 2	—	—	5 1	—	—	6	—	—	7 2
4	—	—	4 3	—	—	5 2	—	—	6 1	—	—	8
5	—	—	5	—	—	5 3	—	—	6 2	—	—	8 1
6	—	—	5	—	—	6	—	—	6 3	—	—	8 2
7	—	—	5 1	—	—	6 1	—	—	7	—	—	9
8	—	—	5 2	—	—	6 2	—	—	7 1	—	—	9 1
9	—	—	5 3	—	—	6 2	—	—	7 2	—	—	9 2
10	—	—	6	—	—	6 3	—	—	7 3	—	—	9 3
1	—	—	6	—	—	7	—	—	8	—	—	10 1
2	—	—	6 1	—	—	7 1	—	—	8 2	—	—	10 2
3	—	—	6 2	—	—	7 2	—	—	8 3	—	—	10 3
4	—	—	6 3	—	—	7 3	—	—	9	—	—	11 1
5	—	—	7	—	—	8	—	—	9 1	—	—	11 2
6	—	—	7	—	—	8 1	—	—	9 2	—	—	11 3
7	—	—	7 1	—	—	8 2	—	—	9 3	—	—	1
8	—	—	7 2	—	—	8 3	—	—	10	—	—	2
9	—	—	7 3	—	—	9	—	—	10 1	—	—	3
10	—	—	7 3	—	—	9	—	—	10 2	—	—	1
1	—	—	8	—	—	9 1	—	—	10 3	—	—	1 2
2	—	—	8 1	—	—	9 2	—	—	11	—	—	1 3
3	—	—	8 2	—	—	9 3	—	—	11 1	—	—	2
4	—	—	8 3	—	—	10	—	—	11 2	—	—	2 1
5	—	—	9	—	—	10 1	—	—	11 3	—	—	2 3
6	—	—	9	—	—	10 2	—	—	1	—	—	3
7	—	—	9 1	—	—	10 3	—	—	1	—	—	3 2
8	—	—	9 2	—	—	11	—	—	1	—	—	3 3
9	—	—	9 3	—	—	11 1	—	—	1	—	—	4
10	—	—	10	—	—	11 2	—	—	1	—	—	4 2
1	—	—	10 1	—	—	11 3	—	—	1	—	—	4 3
2	—	—	10 1	—	—	1	—	—	1	—	—	5
3	—	—	10 2	—	—	1	—	—	1	—	—	5 2
4	—	—	10 3	—	—	1	—	—	1	—	—	5 3
5	—	—	11	—	—	1	—	—	1	—	—	6

TEN DAYS.

381

L. at	3 per Cent.			3 ½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	—	11 —	—	1	— 3	—	1	2 3	—	1	6 2
7	—	—	11 1	—	1	1 —	—	1	3 —	—	1	6 3
8	—	—	11 2	—	1	1 1	—	1	3 1	—	1	7 —
9	—	—	11 2	—	1	1 2	—	1	3 2	—	1	7 2
60	—	—	11 3	—	1	1 3	—	1	3 3	—	1	7 3
1	—	1	— —	—	1	2 —	—	1	4 1	—	1	8 —
2	—	1	— 1	—	1	2 1	—	1	4 2	—	1	8 1
3	—	1	— 2	—	1	2 2	—	1	4 3	—	1	8 3
4	—	1	— 3	—	1	2 3	—	1	5 —	—	1	9 —
5	—	1	— 3	—	1	3 —	—	1	5 1	—	1	9 1
6	—	1	1 —	—	1	3 1	—	1	5 2	—	1	9 2
7	—	1	1 1	—	1	3 1	—	1	5 3	—	1	10 —
8	—	1	1 2	—	1	3 2	—	1	6 —	—	1	10 1
9	—	1	1 3	—	1	3 3	—	1	6 1	—	1	10 2
70	—	1	1 3	—	1	4 —	—	1	6 2	—	1	11 —
1	—	1	2 —	—	1	4 1	—	1	6 3	—	1	11 1
2	—	1	2 1	—	1	4 2	—	1	7 —	—	1	11 2
3	—	1	2 2	—	1	4 3	—	1	7 1	—	1	11 3
4	—	1	2 2	—	1	5 —	—	1	7 2	—	2	— 1
5	—	1	2 3	—	1	5 1	—	1	7 3	—	2	— 2
6	—	1	3 —	—	1	5 2	—	1	8 —	—	2	— 3
7	—	1	3 —	—	1	5 3	—	1	8 1	—	2	1 1
8	—	1	3 1	—	1	6 —	—	1	8 2	—	2	1 2
9	—	1	3 2	—	1	6 1	—	1	8 3	—	2	1 3
80	—	1	3 3	—	1	6 1	—	1	9 —	—	2	2 1
1	—	1	4 —	—	1	6 2	—	1	9 1	—	2	2 2
2	—	1	4 —	—	1	6 3	—	1	9 2	—	2	2 3
3	—	1	4 1	—	1	7 —	—	1	9 3	—	2	3 1
4	—	1	4 2	—	1	7 1	—	1	10 —	—	2	3 2
5	—	1	4 3	—	1	7 2	—	1	10 1	—	2	4 —
6	—	1	5 —	—	1	7 3	—	1	10 2	—	2	4 1
7	—	1	5 1	—	1	8 —	—	1	10 3	—	2	4 2
8	—	1	5 2	—	1	8 1	—	1	11 —	—	2	4 3
9	—	1	5 2	—	1	8 2	—	1	11 1	—	2	5 —
90	—	1	5 3	—	1	8 3	—	1	11 2	—	2	5 2
1	—	1	6 —	—	1	9 —	—	2	— —	—	2	5 3
2	—	1	6 —	—	1	9 1	—	2	— 1	—	2	6 —
3	—	1	6 1	—	1	9 1	—	2	— 2	—	2	6 2
4	—	1	6 2	—	1	9 2	—	2	— 3	—	2	6 3
5	—	1	6 3	—	1	9 3	—	2	1 —	—	2	7 1
6	—	1	7 —	—	1	10 —	—	2	1 1	—	2	7 2
7	—	1	7 —	—	1	10 1	—	2	1 2	—	2	7 3
8	—	1	7 1	—	1	10 2	—	2	1 3	—	2	8 1
9	—	1	7 2	—	1	10 3	—	2	2 —	—	2	8 2
100	—	1	7 3	—	1	11 —	—	2	2 1	—	2	8 3
200	—	3	3 2	—	3	10 —	—	4	4 2	—	5	5 3
300	—	4	11 —	—	5	9 —	—	6	7 —	—	8	2 2
400	—	6	7 —	—	7	8 —	—	8	9 1	—	10	11 2
500	—	8	2 2	—	9	7 —	—	10	11 2	—	13	8 2
600	—	9	10 1	—	11	6 —	—	13	1 3	—	16	5 1
700	—	11	6 —	—	13	5 1	—	15	4 —	—	19	2 —
800	—	13	1 3	—	15	4 1	—	17	6 1	—	1	10 3
900	—	14	9 2	—	17	3 1	—	19	8 3	—	1	4 7 3
1000	—	16	5 1	—	19	2 1	—	1	1 11 —	—	1	7 4 3
2000	—	1	12 10 2	—	1	18 4 2	—	2	3 10 —	—	2	4 9 2

ELEVEN DAYS.

[illegible]

ELEVEN DAYS.

383

L. at	3 per Cent.			3 ½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	— 1	—	1	2 1	—	1	4 1	—	1	8 1
7	—	1	— 2	—	1	2 2	—	1	4 2	—	1	8 2
8	—	1	— 3	—	1	2 3	—	1	4 3	—	1	9 —
9	—	1	— 3	—	1	3 —	—	1	5 —	—	1	9 1
60	—	1	1 —	—	1	3 1	—	1	5 1	—	1	9 3
1	—	1	1 1	—	1	3 2	—	1	5 2	—	1	10 1
2	—	1	1 2	—	1	3 3	—	1	6 —	—	1	10 2
3	—	1	1 3	—	1	4 —	—	1	6 1	—	1	10 3
4	—	1	2 —	—	1	4 1	—	1	6 2	—	1	11 1
5	—	1	2 —	—	1	4 2	—	1	6 3	—	1	11 3
6	—	1	2 1	—	1	4 3	—	1	7 —	—	2	— —
7	—	1	2 2	—	1	5 —	—	1	7 1	—	2	— 1
8	—	1	2 3	—	1	5 1	—	1	7 2	—	2	— 2
9	—	1	3 —	—	1	5 2	—	1	8 —	—	2	1 —
70	—	1	3 1	—	1	5 3	—	1	8 1	—	2	1 1
1	—	1	3 1	—	1	6 —	—	1	8 2	—	2	1 3
2	—	1	3 2	—	1	6 1	—	1	8 3	—	2	2 —
3	—	1	3 3	—	1	6 2	—	1	9 —	—	2	2 1
4	—	1	4 —	—	1	6 3	—	1	9 2	—	2	2 3
5	—	1	4 1	—	1	7 —	—	1	9 3	—	2	3 —
6	—	1	4 2	—	1	7 1	—	1	10 —	—	2	3 2
7	—	1	4 3	—	1	7 2	—	1	10 1	—	2	3 3
8	—	1	4 3	—	1	7 3	—	1	10 2	—	2	4 1
9	—	1	5 —	—	1	8 —	—	1	11 —	—	2	4 2
80	—	1	5 1	—	1	8 1	—	1	11 1	—	2	5 —
1	—	1	5 2	—	1	8 2	—	1	11 2	—	2	5 1
2	—	1	5 3	—	1	8 3	—	1	11 3	—	2	5 3
3	—	1	6 —	—	1	9 —	—	2	— —	—	2	6 —
4	—	1	6 —	—	1	9 1	—	2	— 1	—	2	6 1
5	—	1	6 1	—	1	9 2	—	2	— 2	—	2	6 3
6	—	1	6 2	—	1	9 3	—	2	1 —	—	2	7 —
7	—	1	6 3	—	1	10 —	—	2	1 1	—	2	7 2
8	—	1	7 —	—	1	10 1	—	2	1 2	—	2	7 3
9	—	1	7 1	—	1	10 2	—	2	1 3	—	2	8 1
90	—	1	7 2	—	1	10 3	—	2	2 —	—	2	8 2
1	—	1	7 3	—	1	11 —	—	2	2 1	—	2	9 —
2	—	1	8 —	—	1	11 1	—	2	2 2	—	2	9 1
3	—	1	8 —	—	1	11 2	—	2	3 —	—	2	9 3
4	—	1	8 1	—	1	11 3	—	2	3 1	—	2	10 —
5	—	1	8 2	—	2	— —	—	2	3 2	—	2	10 2
6	—	1	8 3	—	2	— 1	—	2	3 3	—	2	10 3
7	—	1	9 —	—	2	— 2	—	2	4 1	—	2	11 1
8	—	1	9 1	—	2	— 3	—	2	4 2	—	2	11 2
9	—	1	9 2	—	2	1 —	—	2	4 3	—	3	11 3
100	—	1	9 3	—	2	1 1	—	2	5 —	—	3	— —
200	—	3	7 2	—	4	2 3	—	4	9 3	—	6	— 1
300	—	5	5 1	—	6	4 —	—	7	2 3	—	9	— 2
400	—	7	2 3	—	8	5 1	—	9	7 3	—	12	— 2
500	—	9	— 2	—	10	6 2	—	12	— 3	—	15	— 3
600	—	10	10 1	—	12	7 3	—	14	5 2	—	18	1 —
700	—	12	7 3	—	14	9 1	—	16	10 2	—	1	4 1 1
800	—	14	5 2	—	16	10 2	—	19	3 2	—	1	4 1 2
900	—	16	3 1	—	18	11 3	—	1	1 8 2	—	1	7 1 2
1000	—	18	1 —	—	1	1 1 1	—	1	4 1 1	—	1	10 1 3
2000	—	1	16 2 —	—	2	2 2 2	—	2	8 2 2	—	3	— 3 1

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	—	1	—	—	1	—	—	1	—	—
2	—	—	—	2	—	—	2	—	—	3	—	—
3	—	—	—	3	—	—	3	—	—	1 1	—	—
4	—	—	1	—	—	1	—	—	1 1	—	—	1 2
5	—	—	1 1	—	—	1 1	—	—	1 2	—	—	2 —
6	—	—	1 2	—	—	1 2	—	—	1 3	—	—	2 1
7	—	—	1 3	—	—	1 3	—	—	2 —	—	—	2 3
8	—	—	2 —	—	—	2 1	—	—	2 2	—	—	3 —
9	—	—	2 1	—	—	2 2	—	—	2 3	—	—	3 2
10	—	—	2 1	—	—	2 3	—	—	3 —	—	—	4 —
11	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 1
12	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
13	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 —
14	—	—	3 1	—	—	3 3	—	—	4 2	—	—	5 2
15	—	—	3 2	—	—	4 —	—	—	4 3	—	—	5 3
16	—	—	3 3	—	—	4 1	—	—	5 —	—	—	6 1
17	—	—	4 —	—	—	4 3	—	—	5 1	—	—	6 2
18	—	—	4 1	—	—	5 —	—	—	5 2	—	—	7 —
19	—	—	4 2	—	—	5 1	—	—	6 —	—	—	7 2
20	—	—	4 3	—	—	5 2	—	—	6 1	—	—	7 3
1	—	—	5 —	—	—	5 3	—	—	6 2	—	—	8 1
2	—	—	5 1	—	—	6 —	—	—	7 —	—	—	8 3
3	—	—	5 2	—	—	6 1	—	—	7 1	—	—	9 —
4	—	—	5 2	—	—	6 2	—	—	7 2	—	—	9 1
5	—	—	5 3	—	—	7 —	—	—	7 3	—	—	9 3
6	—	—	6 —	—	—	7 1	—	—	8 1	—	—	10 1
7	—	—	6 1	—	—	7 2	—	—	8 2	—	—	10 3
8	—	—	6 2	—	—	7 3	—	—	8 3	—	—	11 1
9	—	—	6 3	—	—	8 —	—	—	9 —	—	—	11 3
30	—	—	7 —	—	—	8 1	—	—	9 2	—	—	—
1	—	—	7 1	—	—	8 2	—	—	9 3	—	—	—
2	—	—	7 2	—	—	8 3	—	—	10 —	—	—	—
3	—	—	7 3	—	—	9 —	—	—	10 2	—	—	—
4	—	—	8 —	—	—	9 2	—	—	10 3	—	—	—
5	—	—	8 1	—	—	9 3	—	—	11 —	—	—	—
6	—	—	8 2	—	—	10 —	—	—	11 2	—	—	—
7	—	—	8 3	—	—	10 1	—	—	11 3	—	—	—
8	—	—	9 —	—	—	10 2	—	—	—	—	—	—
9	—	—	9 1	—	—	10 3	—	—	1 —	—	—	—
40	—	—	9 2	—	—	11 —	—	—	2 —	—	—	—
1	—	—	9 3	—	—	11 1	—	—	1 —	—	—	—
2	—	—	10 —	—	—	11 2	—	—	1 1	—	—	—
3	—	—	10 1	—	—	11 3	—	—	1 2	—	—	—
4	—	—	10 2	—	—	—	—	—	1 3	—	—	—
5	—	—	10 3	—	—	1 —	—	—	2 1	—	—	—
6	—	—	11 —	—	—	1 2	—	—	2 2	—	—	—
7	—	—	11 1	—	—	1 3	—	—	3 —	—	—	—
8	—	—	11 2	—	—	1 4	—	—	3 1	—	—	—
9	—	—	11 3	—	—	2 —	—	—	3 2	—	—	—
50	—	—	—	—	—	2 1	—	—	3 3	—	—	—
1	—	—	—	—	—	2 2	—	—	4 —	—	—	—
2	—	—	—	—	—	2 3	—	—	4 1	—	—	—
3	—	—	—	—	—	3 —	—	—	4 2	—	—	—
4	—	—	—	—	—	3 1	—	—	5 —	—	—	—
5	—	—	—	—	—	3 2	—	—	5 1	—	—	—

56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
1
2
3
4
5
6
7
8
9
100
100
300
400
500
600
700
800
900
1000
1000

TWELVE DAYS.

385

Lat.	3 per Cent.				3 1/2 per Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
56	—	1	1	—	—	1	3	2	—	1	5	2	—	1	10	—
7	—	1	1	1	—	1	3	3	—	1	6	—	—	1	10	2
8	—	1	1	2	—	1	4	—	—	1	6	1	—	1	10	3
9	—	1	1	3	—	1	4	1	—	1	6	2	—	1	11	1
60	—	1	2	—	—	1	4	2	—	1	6	3	—	1	11	3
1	—	1	2	1	—	1	5	—	—	1	7	1	—	2	—	—
2	—	1	2	2	—	1	5	1	—	1	7	2	—	2	—	2
3	—	1	2	3	—	1	5	2	—	1	7	3	—	2	—	3
4	—	1	3	—	—	1	5	3	—	1	8	1	—	2	1	1
5	—	1	3	1	—	1	6	—	—	1	8	2	—	2	1	2
6	—	1	3	2	—	1	6	1	—	1	8	3	—	2	2	—
7	—	1	3	3	—	1	6	2	—	1	9	—	—	2	2	1
8	—	1	4	—	—	1	6	3	—	1	9	2	—	2	2	3
9	—	1	4	1	—	1	7	—	—	1	9	3	—	2	3	—
70	—	1	4	2	—	1	7	2	—	1	10	—	—	2	3	2
1	—	1	4	3	—	1	7	3	—	1	10	2	—	2	4	—
2	—	1	5	—	—	1	8	—	—	1	10	3	—	2	4	1
3	—	1	5	1	—	1	8	1	—	1	11	—	—	2	4	3
4	—	1	5	2	—	1	8	2	—	1	11	2	—	2	5	1
5	—	1	5	3	—	1	8	3	—	1	11	3	—	2	5	2
6	—	1	5	3	—	1	9	—	—	2	—	—	—	2	6	—
7	—	1	6	—	—	1	9	2	—	2	—	1	—	2	6	1
8	—	1	6	1	—	1	9	3	—	2	—	2	—	2	6	3
9	—	1	6	2	—	1	10	—	—	2	1	—	—	2	7	—
80	—	1	6	3	—	1	10	1	—	2	1	1	—	2	7	2
1	—	1	7	—	—	1	10	2	—	2	1	2	—	2	8	—
2	—	1	7	1	—	1	10	3	—	2	1	3	—	2	8	1
3	—	1	7	2	—	1	11	—	—	2	2	1	—	2	8	3
4	—	1	7	3	—	1	11	1	—	2	2	2	—	2	9	1
5	—	1	8	—	—	1	11	2	—	2	2	3	—	2	9	2
6	—	1	8	1	—	1	11	3	—	2	3	1	—	2	10	—
7	—	1	8	2	—	2	—	1	—	2	3	2	—	2	10	1
8	—	1	8	3	—	2	—	2	—	2	3	3	—	2	10	3
9	—	1	9	—	—	2	—	3	—	2	4	—	—	2	11	—
90	—	1	9	1	—	2	1	—	—	2	4	2	—	2	11	2
1	—	1	9	2	—	2	1	1	—	2	4	3	—	3	—	—
2	—	1	9	3	—	2	1	2	—	2	5	—	—	3	—	1
3	—	1	10	—	—	2	1	3	—	2	5	2	—	3	—	3
4	—	1	10	1	—	2	2	—	—	2	5	3	—	3	1	—
5	—	1	10	2	—	2	2	1	—	2	6	—	—	3	1	2
6	—	1	10	3	—	2	2	2	—	2	6	1	—	3	1	3
7	—	1	11	—	—	2	2	3	—	2	6	3	—	3	2	—
8	—	1	11	1	—	2	3	—	—	2	7	—	—	3	2	1
9	—	1	11	2	—	2	3	1	—	2	7	1	—	3	2	3
100	—	1	11	3	—	2	3	2	—	2	7	2	—	3	3	1
200	—	3	11	1	—	4	7	1	—	5	3	1	—	6	6	3
300	—	5	11	—	—	6	10	3	—	7	10	3	—	9	10	1
400	—	7	10	3	—	9	2	3	—	10	6	1	—	13	1	3
500	—	9	10	1	—	11	6	—	—	13	1	3	—	16	5	1
600	—	11	10	—	—	13	9	3	—	15	9	1	—	19	8	3
700	—	13	9	3	—	16	1	1	—	18	5	—	—	1	3	—
800	—	15	9	2	—	18	5	—	—	1	1	—	2	1	6	3
900	—	17	9	1	—	1	—	8	2	1	3	8	—	1	9	7
1000	—	19	9	1	—	1	3	—	—	1	6	3	3	1	12	10
1000	—	1	19	6	1	2	6	—	1	2	12	7	1	3	5	9

S

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	1	—	—	1	—	—	1
2	—	—	2	—	—	2	—	—	2	—	—	2
3	—	—	3	—	—	3	—	—	3	—	—	3
4	—	—	1 1	—	—	1 1	—	—	1 1	—	—	1 1
5	—	—	1 1	—	—	1 2	—	—	1 3	—	—	2
6	—	—	1 2	—	—	1 3	—	—	2	—	—	2 2
7	—	—	1 3	—	—	2	—	—	2 2	—	—	3
8	—	—	2	—	—	2 1	—	—	2 3	—	—	3 1
9	—	—	2 1	—	—	2 2	—	—	3	—	—	3 3
10	—	—	2 2	—	—	3	—	—	3 2	—	—	4 1
11	—	—	2 3	—	—	3 1	—	—	3 3	—	—	4 3
12	—	—	3	—	—	3 2	—	—	4 1	—	—	5
13	—	—	3 1	—	—	3 3	—	—	4 2	—	—	5 2
14	—	—	3 2	—	—	4	—	—	4 3	—	—	6
15	—	—	3 3	—	—	4 2	—	—	5 1	—	—	6 1
16	—	—	4	—	—	4 3	—	—	5 2	—	—	6 3
17	—	—	4 1	—	—	5	—	—	5 3	—	—	7 1
18	—	—	4 2	—	—	5 1	—	—	6 1	—	—	7 3
19	—	—	4 3	—	—	5 2	—	—	6 2	—	—	8
20	—	—	5	—	—	6	—	—	6 3	—	—	8 2
1	—	—	5 1	—	—	6 1	—	—	7 1	—	—	9
2	—	—	5 2	—	—	6 2	—	—	7 2	—	—	9 1
3	—	—	5 3	—	—	6 3	—	—	8	—	—	9 3
4	—	—	6	—	—	7	—	—	8 1	—	—	10
5	—	—	6 1	—	—	7 2	—	—	8 2	—	—	10 2
6	—	—	6 2	—	—	7 3	—	—	9	—	—	11
7	—	—	6 3	—	—	8	—	—	9 1	—	—	11 2
8	—	—	7	—	—	8 1	—	—	9 3	—	—	11 3
9	—	—	7 1	—	—	8 2	—	—	10	—	—	1
10	—	—	7 3	—	—	9	—	—	10 1	—	—	1 3
11	—	—	8	—	—	9 1	—	—	10 2	—	—	1 1
12	—	—	8 1	—	—	9 2	—	—	11	—	—	1 3
13	—	—	8 2	—	—	9 3	—	—	11 1	—	—	2
14	—	—	8 3	—	—	10	—	—	11 2	—	—	2 2
15	—	—	9	—	—	10 1	—	—	1	—	—	3
16	—	—	9 1	—	—	10 3	—	—	1	—	—	3 2
17	—	—	9 2	—	—	11	—	—	1	—	—	3 3
18	—	—	9 3	—	—	11 1	—	—	1 1	—	—	4 1
19	—	—	10	—	—	11 2	—	—	1 1	—	—	4 3
20	—	—	10 1	—	—	11 3	—	—	1 3	—	—	5
1	—	—	10 2	—	—	1	—	—	1 2	—	—	5 2
2	—	—	10 3	—	—	1 2	—	—	1 2 1	—	—	6
3	—	—	11	—	—	1 3	—	—	1 2 3	—	—	6 1
4	—	—	11 1	—	—	1 1	—	—	1 3	—	—	6 3
5	—	—	11 2	—	—	1 1	—	—	1 3 1	—	—	7 1
6	—	—	11 3	—	—	1 3	—	—	1 3 3	—	—	7 3
7	—	—	1	—	—	1 2	—	—	1 4	—	—	8
8	—	—	1	—	—	1 2 1	—	—	1 4 2	—	—	8 2
9	—	—	1 2	—	—	1 2 3	—	—	1 4 3	—	—	8 3
10	—	—	1 3	—	—	1 3	—	—	1 5 1	—	—	9 1
11	—	—	1 1	—	—	1 3 1	—	—	1 5 2	—	—	9 3
12	—	—	1 1 1	—	—	1 3 2	—	—	1 6	—	—	10 1
13	—	—	1 1 2	—	—	1 4	—	—	1 6 1	—	—	10 2
14	—	—	1 1 3	—	—	1 4 1	—	—	1 6 2	—	—	11
15	—	—	1 2	—	—	1 4 2	—	—	1 7	—	—	11 2

L. at
56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
100
200
300
400
500
600
700
800
900
1000
2000

THIRTEEN DAYS.

387

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	2 2	—	1	4 3	—	1	7 1	—	2	—
7	—	1	2 3	—	1	5 —	—	1	7 2	—	2	—
8	—	1	3 —	—	1	5 1	—	1	8 —	—	2	—
9	—	1	3 1	—	1	5 2	—	1	8 1	—	2	1
60	—	1	3 2	—	1	6 —	—	1	8 2	—	2	1
1	—	1	3 3	—	1	6 1	—	1	9 —	—	2	2
2	—	1	4 —	—	1	6 2	—	1	9 1	—	2	2
3	—	1	4 1	—	1	6 3	—	1	9 2	—	2	3
4	—	1	4 2	—	1	7 —	—	1	10 —	—	2	3
5	—	1	4 3	—	1	7 2	—	1	10 1	—	2	3
6	—	1	5 —	—	1	7 3	—	1	10 3	—	2	4
7	—	1	5 1	—	1	8 —	—	1	11 —	—	2	4
8	—	1	5 2	—	1	8 1	—	1	11 1	—	2	5
9	—	1	5 3	—	1	8 2	—	1	11 2	—	2	5
70	—	1	6 —	—	1	9 —	—	2	—	—	2	5
1	—	1	6 1	—	1	9 1	—	2	—	1	2	6
2	—	1	6 2	—	1	9 2	—	2	—	2	2	6
3	—	1	6 3	—	1	9 3	—	2	1 —	—	2	7
4	—	1	7 —	—	1	10 —	—	2	1 1	—	2	7
5	—	1	7 1	—	1	10 2	—	2	1 2	—	2	8
6	—	1	7 2	—	1	10 3	—	2	2 —	—	2	8
7	—	1	7 3	—	1	11 —	—	2	2 1	—	2	8
8	—	1	8 —	—	1	11 1	—	2	2 3	—	2	9
9	—	1	8 1	—	1	11 2	—	2	3 —	—	2	9
80	—	1	8 2	—	2	—	—	2	3 1	—	2	10
1	—	1	8 3	—	2	—	1	—	2	3 3	—	2
2	—	1	9 —	—	2	—	2	—	2	4 —	—	2
3	—	1	9 1	—	2	—	3	—	2	4 1	—	2
4	—	1	9 2	—	2	—	1	—	2	4 3	—	2
5	—	1	9 3	—	2	1 1	—	—	2	5 —	—	3
6	—	1	10 —	—	2	1 3	—	—	2	5 1	—	3
7	—	1	10 1	—	2	2 —	—	—	2	5 2	—	3
8	—	1	10 2	—	2	2 1	—	—	2	6 —	—	3
9	—	1	10 3	—	2	2 2	—	—	2	6 1	—	3
90	—	1	11 —	—	2	2 3	—	—	2	6 3	—	3
1	—	1	11 1	—	2	3 —	—	—	2	7 —	—	3
2	—	1	11 2	—	2	3 2	—	—	2	7 2	—	3
3	—	1	11 3	—	2	3 3	—	—	2	7 3	—	3
4	—	2	—	—	2	4 —	—	—	2	8 —	—	3
5	—	2	—	1	—	4 2	—	—	2	8 2	—	3
6	—	2	—	2	—	4 3	—	—	2	8 3	—	3
7	—	2	—	3	—	5 —	—	—	2	9 1	—	3
8	—	2	1 —	—	2	5 1	—	—	2	9 2	—	3
9	—	2	1 1	—	2	5 2	—	—	2	10 —	—	3
100	—	2	1 3	—	2	6 —	—	—	2	10 1	—	3
200	—	4	3 1	—	4	11 3	—	—	5	8 2	—	7
300	—	6	5 —	—	7	5 3	—	—	8	6 2	—	10
400	—	8	6 2	—	9	11 3	—	—	11	4 3	—	14
500	—	10	8 1	—	12	5 3	—	—	14	3 —	—	17
600	—	12	10 —	—	14	11 2	—	—	17	1 —	1	1
700	—	14	11 2	—	17	5 2	—	—	19	11 1	1	4
800	—	17	1 —	—	19	11 2	1	2	9 2	1	8	5
900	—	19	2 3	1	2	5 2	1	5	7 2	1	12	—
1000	1	1	4 2	1	4	10 1	1	8	5 3	1	15	7
3000	2	2	9 —	2	9	10 2	2	16	11 3	3	11	2

L. at	3 per Cent.				3 $\frac{1}{2}$ per Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
1	—	—	—	1	—	—	—	1	—	—	—	1	—	—	—	2
2	—	—	—	2	—	—	—	2	—	—	—	3	—	—	—	3
3	—	—	—	3	—	—	—	3	—	—	—	1	—	—	1	1
4	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	3
5	—	—	—	1	—	—	—	1	—	—	—	1	—	—	2	1
6	—	—	—	1	—	—	—	1	—	—	—	2	—	—	2	3
7	—	—	—	1	—	—	—	2	—	—	—	2	—	—	3	1
8	—	—	—	2	—	—	—	2	—	—	—	3	—	—	3	3
9	—	—	—	2	—	—	—	2	—	—	—	3	—	—	4	—
10	—	—	—	2	—	—	—	3	—	—	—	3	—	—	4	2
11	—	—	—	3	—	—	—	3	—	—	—	4	—	—	5	—
12	—	—	—	3	—	—	—	3	—	—	—	4	—	—	5	2
13	—	—	—	3	—	—	—	4	—	—	—	4	—	—	6	—
14	—	—	—	3	—	—	—	4	—	—	—	5	—	—	6	2
15	—	—	—	4	—	—	—	4	—	—	—	5	—	—	7	—
16	—	—	—	4	—	—	—	5	—	—	—	5	—	—	7	2
17	—	—	—	4	—	—	—	5	—	—	—	6	—	—	7	3
18	—	—	—	5	—	—	—	5	—	—	—	6	—	—	8	1
19	—	—	—	5	—	—	—	6	—	—	—	6	—	—	8	3
20	—	—	—	5	—	—	—	6	—	—	—	7	—	—	9	1
1	—	—	—	5	—	—	—	6	—	—	—	7	—	—	9	3
2	—	—	—	6	—	—	—	7	—	—	—	8	—	—	10	—
3	—	—	—	6	—	—	—	7	—	—	—	8	—	—	10	2
4	—	—	—	6	—	—	—	7	—	—	—	8	—	—	11	—
5	—	—	—	7	—	—	—	8	—	—	—	9	—	—	11	2
6	—	—	—	7	—	—	—	8	—	—	—	9	—	—	1	—
7	—	—	—	7	—	—	—	8	—	—	—	9	—	—	1	—
8	—	—	—	7	—	—	—	9	—	—	—	10	—	—	1	—
9	—	—	—	8	—	—	—	9	—	—	—	10	—	—	1	—
10	—	—	—	8	—	—	—	9	—	—	—	10	—	—	1	—
1	—	—	—	8	—	—	—	10	—	—	—	11	—	—	1	—
2	—	—	—	8	—	—	—	10	—	—	—	11	—	—	1	—
3	—	—	—	9	—	—	—	10	—	—	—	1	—	—	1	—
4	—	—	—	9	—	—	—	11	—	—	—	1	—	—	1	—
5	—	—	—	9	—	—	—	11	—	—	—	1	—	—	1	—
6	—	—	—	10	—	—	—	11	—	—	—	1	—	—	1	—
7	—	—	—	10	—	—	—	1	—	—	—	1	—	—	1	—
8	—	—	—	10	—	—	—	1	—	—	—	1	—	—	1	—
9	—	—	—	10	—	—	—	1	—	—	—	1	—	—	1	—
10	—	—	—	11	—	—	—	1	—	—	—	1	—	—	1	—
1	—	—	—	11	—	—	—	1	—	—	—	1	—	—	1	—
2	—	—	—	11	—	—	—	1	—	—	—	1	—	—	1	—
3	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
4	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
5	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
6	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
7	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
8	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
9	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
10	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
1	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
2	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
3	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
4	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
5	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
6	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
7	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
8	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
9	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
10	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
1	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
2	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
3	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
4	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—
5	—	—	—	1	—	—	—	1	—	—	—	1	—	—	1	—

L. at
56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
1
2
3
4
5
6
7
8
9
100
200
300
400
500
600
700
800
900
1000

FOURTEEN DAYS.

389

L. at	3. per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	3 2	—	1	6 —	—	1	8 2	—	2	1 3
7	—	1	3 3	—	1	6 1	—	1	8 3	—	2	2 1
8	—	1	4 —	—	1	6 3	—	1	9 1	—	2	2 3
9	—	1	4 1	—	1	7 —	—	1	9 3	—	2	3 1
60	—	1	4 3	—	1	7 1	—	1	10 —	—	2	3 2
1	—	1	5 —	—	1	7 2	—	1	10 2	—	2	4 —
2	—	1	5 1	—	1	8 —	—	1	10 3	—	2	4 2
3	—	1	5 2	—	1	8 1	—	1	11 1	—	2	5 —
4	—	1	5 3	—	1	8 2	—	1	11 2	—	2	5 2
5	—	1	6 —	—	1	8 3	—	2	—	—	2	6 —
6	—	1	6 1	—	1	9 1	—	2	—	—	2	6 1
7	—	1	6 2	—	1	9 2	—	2	—	—	2	6 3
8	—	1	6 3	—	1	9 3	—	2	1 —	—	2	7 1
9	—	1	7 —	—	1	10 1	—	2	1 1	—	2	7 3
70	—	1	7 2	—	1	10 2	—	2	1 3	—	2	8 1
1	—	1	7 3	—	1	10 3	—	2	2 —	—	2	8 3
2	—	1	8 —	—	1	11 1	—	2	2 2	—	2	9 —
3	—	1	8 1	—	1	11 2	—	2	2 3	—	2	9 2
4	—	1	8 2	—	1	11 3	—	2	3 1	—	2	10 —
5	—	1	8 3	—	2	—	—	2	3 3	—	2	10 2
6	—	1	9 —	—	2	—	2	4 —	—	2	11 —	
7	—	1	9 1	—	2	—	2	4 2	—	2	11 2	
8	—	1	9 2	—	2	1 —	—	2	4 3	—	3	—
9	—	1	9 3	—	2	1 1	—	2	5 1	—	3	—
80	—	1	10 1	—	2	1 3	—	2	5 2	—	3	—
1	—	1	10 2	—	2	2 —	—	2	5 3	—	3	1 1
2	—	1	10 3	—	2	2 1	—	2	6 1	—	3	1 3
3	—	1	11 —	—	2	2 3	—	2	6 2	—	3	2 —
4	—	1	11 1	—	2	3 —	—	2	7 —	—	3	2 2
5	—	1	11 2	—	2	3 1	—	2	7 1	—	3	3 —
6	—	1	11 3	—	2	3 3	—	2	7 2	—	3	3 2
7	—	2	—	—	2	4 —	—	2	8 —	—	3	4 —
8	—	2	—	—	2	4 1	—	2	8 1	—	3	4 2
9	—	2	—	—	2	4 2	—	2	8 2	—	3	5 —
90	—	2	—	—	2	5 —	—	2	9 —	—	3	5 1
1	—	2	1 —	—	2	5 1	—	2	9 1	—	3	5 3
2	—	2	1 1	—	2	5 2	—	2	9 3	—	3	6 1
3	—	2	1 2	—	2	6 —	—	2	10 1	—	3	6 3
4	—	2	2 —	—	2	6 1	—	2	10 2	—	3	7 1
5	—	2	2 1	—	2	6 2	—	2	11 —	—	3	7 3
6	—	2	2 2	—	2	6 3	—	2	11 1	—	3	8 1
7	—	2	2 3	—	2	7 1	—	2	11 3	—	3	8 2
8	—	2	3 —	—	2	7 2	—	3	—	—	3	9 —
9	—	2	3 1	—	2	7 3	—	3	—	2	3	9 2
100	—	2	3 2	—	2	8 1	—	3	—	3	—	10 —
200	—	4	7 1	—	5	4 1	—	6	1 2	—	7	8 —
300	—	6	10 3	—	8	—	—	9	2 2	—	11	6 —
400	—	9	2 2	—	10	8 3	—	12	3 1	—	15	4 —
500	—	11	6 —	—	13	5 —	—	15	4 1	—	19	2 —
600	—	13	9 3	—	16	1 1	—	18	5 1	—	1	3 —
700	—	16	1 1	—	18	9 2	—	1	1 5 3	—	1	6 10 1
800	—	18	5 —	—	1	1 5 3	—	1	4 6 2	—	1	10 8 1
900	—	1	—	—	1	4 2 —	—	1	7 7 1	—	1	14 6 2
1000	—	1	3 —	—	1	6 10 1	—	1	10 8 1	—	1	18 4 1
2000	—	2	6 —	—	2	13 8 2	—	3	1 4 2	—	3	16 8 2

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	1	—	—	1	—	—	2
2	—	—	2	—	—	3	—	—	3	—	—	1
3	—	—	3	—	—	1	—	—	1	—	—	12
4	—	—	1	—	—	1	—	—	1	—	—	2
5	—	—	12	—	—	1	—	—	2	—	—	22
6	—	—	13	—	—	2	—	—	2	—	—	3
7	—	—	2	—	—	22	—	—	2	—	—	32
8	—	—	2	—	—	23	—	—	3	—	—	4
9	—	—	22	—	—	3	—	—	3	—	—	42
10	—	—	3	—	—	32	—	—	4	—	—	5
11	—	—	3	—	—	33	—	—	42	—	—	52
12	—	—	32	—	—	4	—	—	5	—	—	6
13	—	—	33	—	—	42	—	—	5	—	—	62
14	—	—	4	—	—	43	—	—	53	—	—	63
15	—	—	42	—	—	5	—	—	6	—	—	7
16	—	—	43	—	—	52	—	—	62	—	—	73
17	—	—	5	—	—	53	—	—	7	—	—	8
18	—	—	5	—	—	6	—	—	7	—	—	83
19	—	—	52	—	—	62	—	—	73	—	—	9
20	—	—	6	—	—	63	—	—	8	—	—	93
1	—	—	6	—	—	7	—	—	82	—	—	10
2	—	—	62	—	—	72	—	—	9	—	—	103
3	—	—	63	—	—	8	—	—	9	—	—	11
4	—	—	7	—	—	8	—	—	93	—	—	113
5	—	—	7	—	—	82	—	—	10	—	—	1
6	—	—	73	—	—	9	—	—	102	—	—	1
7	—	—	8	—	—	9	—	—	11	—	—	1
8	—	—	8	—	—	93	—	—	11	—	—	13
9	—	—	82	—	—	10	—	—	112	—	—	12
30	—	—	83	—	—	102	—	—	1	—	—	123
1	—	—	9	—	—	103	—	—	1	—	—	13
2	—	—	92	—	—	11	—	—	1	—	—	133
3	—	—	93	—	—	112	—	—	1	—	—	14
4	—	—	10	—	—	1	—	—	1	—	—	143
5	—	—	10	—	—	1	—	—	2	—	—	15
6	—	—	103	—	—	1	—	—	2	—	—	153
7	—	—	11	—	—	1	—	—	22	—	—	16
8	—	—	11	—	—	1	—	—	3	—	—	163
9	—	—	112	—	—	1	—	—	32	—	—	17
40	—	—	113	—	—	12	—	—	33	—	—	173
1	—	—	1	—	—	12	—	—	4	—	—	18
2	—	—	12	—	—	122	—	—	42	—	—	183
3	—	—	1	—	—	123	—	—	5	—	—	19
4	—	—	1	—	—	13	—	—	5	—	—	193
5	—	—	1	—	—	13	—	—	53	—	—	20
6	—	—	1	—	—	133	—	—	62	—	—	203
7	—	—	12	—	—	14	—	—	6	—	—	21
8	—	—	12	—	—	142	—	—	7	—	—	213
9	—	—	122	—	—	143	—	—	7	—	—	22
50	—	—	123	—	—	15	—	—	73	—	—	22
1	—	—	13	—	—	152	—	—	8	—	—	2
2	—	—	132	—	—	16	—	—	82	—	—	2
3	—	—	133	—	—	16	—	—	9	—	—	22
4	—	—	14	—	—	163	—	—	9	—	—	222
5	—	—	14	—	—	17	—	—	93	—	—	23

FIFTEEN DAYS.

391

Lat	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	4 3	—	1	7 1	—	1	10 —	—	2	3 2
57	—	1	5 —	—	1	7 3	—	1	10 2	—	2	4 —
58	—	1	5 1	—	1	8 —	—	1	10 3	—	2	4 2
59	—	1	5 2	—	1	8 2	—	1	11 1	—	2	5 —
60	—	1	5 3	—	1	8 3	—	1	11 3	—	2	5 2
61	—	1	6 1	—	1	9 —	—	2	—	—	2	6 —
62	—	1	6 2	—	1	9 2	—	2	—	—	2	6 2
63	—	1	6 3	—	1	9 3	—	2	1 —	—	2	7 —
64	—	1	7 —	—	1	10 1	—	2	1 1	—	2	7 2
65	—	1	7 1	—	1	10 3	—	2	1 3	—	2	8 —
66	—	1	7 3	—	1	11 —	—	2	2 —	—	2	8 2
67	—	1	8 —	—	1	11 1	—	2	2 2	—	2	9 —
68	—	1	8 1	—	1	11 3	—	2	3 —	—	2	9 2
69	—	1	8 2	—	2	—	—	2	3 1	—	2	10 —
70	—	1	8 3	—	2	—	1	—	3 3	—	2	10 2
71	—	1	9 —	—	2	—	3	—	4 1	—	2	11 —
72	—	1	9 1	—	2	1 —	—	2	4 2	—	2	11 2
73	—	1	9 2	—	2	1 1	—	2	5 —	—	3	—
74	—	1	10 —	—	2	1 2	—	2	5 2	—	3	—
75	—	1	10 1	—	2	2 —	—	2	5 3	—	3	1 —
76	—	1	10 2	—	2	2 1	—	2	6 —	—	3	1 2
77	—	1	11 —	—	2	2 2	—	2	6 2	—	3	2 —
78	—	1	11 1	—	2	3 —	—	2	6 3	—	3	2 2
79	—	1	11 2	—	2	3 1	—	2	7 —	—	3	3 —
80	—	1	11 3	—	2	3 3	—	2	7 2	—	3	3 2
81	—	2	—	—	2	4 —	—	2	8 —	—	3	4 —
82	—	2	—	—	2	4 2	—	2	8 1	—	3	4 1
83	—	2	—	—	2	4 3	—	2	8 3	—	3	4 3
84	—	2	1 —	—	2	5 —	—	2	9 —	—	3	5 —
85	—	2	1 1	—	2	5 2	—	2	9 2	—	3	5 3
86	—	2	1 2	—	2	5 3	—	2	10 —	—	3	6 —
87	—	2	2 —	—	2	6 —	—	2	10 1	—	3	6 3
88	—	2	2 1	—	2	6 2	—	2	10 3	—	3	7 —
89	—	2	2 2	—	2	6 3	—	2	11 —	—	3	7 3
90	—	2	2 3	—	2	7 —	—	2	11 2	—	3	8 —
91	—	2	3 —	—	2	7 2	—	3	—	—	3	8 3
92	—	2	3 2	—	2	8 —	—	3	—	—	3	9 —
93	—	2	3 3	—	2	8 1	—	3	—	—	3	9 3
94	—	2	4 —	—	2	8 3	—	3	1 1	—	3	10 —
95	—	2	4 1	—	2	9 —	—	3	1 2	—	3	10 3
96	—	2	4 2	—	2	9 2	—	3	2 —	—	3	11 —
97	—	2	5 —	—	2	9 3	—	3	2 1	—	3	11 3
98	—	2	5 1	—	2	10 —	—	3	2 3	—	4	—
99	—	2	5 2	—	2	10 1	—	3	3 —	—	4	1 —
100	—	2	5 3	—	2	10 2	—	3	3 2	—	4	1 1
200	—	4	11 1	—	5	9 —	—	6	6 3	—	8	2 2
300	—	7	4 3	—	8	7 2	—	9	10 1	—	12	4 —
400	—	9	10 2	—	11	6 —	—	13	1 2	—	16	5 1
500	—	12	4 —	—	14	4 2	—	16	5 1	—	1	—
600	—	14	9 2	—	17	3 1	—	19	8 3	—	1	4 7 3
700	—	17	3 1	—	1	—	1	3 —	—	1	8 9 1	
800	—	19	8 3	—	1	3 —	1	6 3 2	—	1	12 10 2	
900	—	1	2 2 1	—	1	5 10 3	—	1	9 7 —	—	1	17 —
1000	—	1	4 8 —	—	1	8 9 1	—	1	12 10 2	—	2	1 1 1
2000	—	2	9 3 3	—	3	17 6 2	—	3	5 9 —	—	4	2 2 1

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	—	1	—	—	1	—	—	1	—	—
2	—	—	—	2	—	—	3	—	—	3	—	—
3	—	—	—	3	—	—	1	1	—	1	1	—
4	—	—	—	1	1	—	1	2	—	1	3	—
5	—	—	—	1	2	—	1	3	—	2	—	—
6	—	—	—	1	3	—	2	—	—	2	2	—
7	—	—	—	2	1	—	2	2	—	2	—	—
8	—	—	—	2	2	—	3	—	—	3	2	—
9	—	—	—	2	3	—	3	1	—	3	3	—
10	—	—	—	3	—	—	3	3	—	4	1	—
11	—	—	—	3	2	—	4	—	—	4	3	—
12	—	—	—	3	3	—	4	2	—	5	—	—
13	—	—	—	4	—	—	4	3	—	5	2	—
14	—	—	—	4	1	—	5	1	—	6	—	—
15	—	—	—	4	3	—	5	2	—	6	2	—
16	—	—	—	5	—	—	6	—	—	6	3	—
17	—	—	—	5	1	—	6	1	—	7	1	—
18	—	—	—	5	3	—	6	3	—	7	3	—
19	—	—	—	6	—	—	7	—	—	8	1	—
20	—	—	—	6	1	—	7	1	—	8	2	—
1	—	—	—	6	2	—	7	3	—	8	3	—
2	—	—	—	7	—	—	8	—	—	9	1	—
3	—	—	—	7	1	—	8	1	—	9	3	—
4	—	—	—	7	2	—	8	3	—	10	1	—
5	—	—	—	8	—	—	9	1	—	10	2	—
6	—	—	—	8	1	—	9	3	—	11	—	—
7	—	—	—	8	2	—	10	—	—	11	2	—
8	—	—	—	8	3	—	10	2	—	1	1	—
9	—	—	—	9	1	—	10	3	—	1	2	—
30	—	—	—	9	2	—	11	—	—	1	3	—
1	—	—	—	9	3	—	11	2	—	1	3	1
2	—	—	—	10	—	—	1	1	1	1	3	3
3	—	—	—	10	2	—	1	1	2	1	4	1
4	—	—	—	10	3	—	1	3	—	1	4	3
5	—	—	—	11	—	—	1	1	—	1	5	1
6	—	—	—	11	2	—	1	2	—	1	5	3
7	—	—	—	11	3	—	1	3	1	1	6	1
8	—	1	—	—	—	—	1	3	3	1	7	—
9	—	1	—	2	—	—	1	4	1	1	7	2
40	—	1	—	3	—	—	1	4	2	1	8	—
1	—	1	—	1	—	—	1	5	—	1	8	2
2	—	1	1	1	—	—	1	5	1	1	9	—
3	—	1	1	3	—	—	1	5	3	1	9	2
4	—	1	2	—	—	—	1	6	1	1	10	—
5	—	1	2	1	—	—	1	6	3	1	10	3
6	—	1	2	2	—	—	1	7	—	1	11	1
7	—	1	3	—	—	—	1	7	2	2	11	3
8	—	1	3	1	—	—	1	8	—	2	—	—
9	—	1	3	2	—	—	1	8	2	2	1	1
50	—	1	3	3	—	—	1	8	3	2	1	3
1	—	1	4	1	—	—	1	9	1	2	1	3
2	—	1	4	2	—	—	1	9	2	2	2	1
3	—	1	4	3	—	—	1	10	—	2	2	3
4	—	1	5	—	—	—	1	10	1	2	3	2
5	—	1	5	2	—	—	1	10	3	2	4	—
							1	11	—	2	4	2
										2	5	—

L. at

56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
1
2
3
4
5
6
7
8
9
100
200
300
400
500
600
700
800
900
1000
2000

SIXTEEN DAYS.

393

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	5 3	—	1	8 3	—	1	11 2	—	2	5 2
7	—	1	6 —	—	1	9 —	—	2	—	—	2	6 —
8	—	1	6 1	—	1	9 1	—	2	—	—	2	6 2
9	—	1	6 3	—	1	9 3	—	2	—	—	2	7 —
60	—	1	7 —	—	1	10 —	—	2	1 1	—	2	7 2
1	—	1	7 1	—	1	10 2	—	2	1 2	—	2	8 —
2	—	1	7 2	—	1	10 3	—	2	2 —	—	2	8 2
3	—	1	7 3	—	1	11 1	—	2	2 2	—	2	9 1
4	—	1	8 1	—	1	11 2	—	2	3 —	—	2	9 3
5	—	1	8 2	—	2	—	—	2	3 1	—	2	10 1
6	—	1	8 3	—	2	—	—	2	3 3	—	2	10 3
7	—	1	9 —	—	2	—	—	2	4 1	—	2	11 1
8	—	1	9 2	—	2	1 —	—	2	4 3	—	2	11 3
9	—	1	9 3	—	2	1 2	—	2	5 —	—	3	—
70	—	1	10 —	—	2	1 3	—	2	5 2	—	3	1 3
1	—	1	10 1	—	2	2 1	—	2	6 —	—	3	1 1
2	—	1	10 3	—	2	2 2	—	2	6 2	—	3	1 3
3	—	1	11 —	—	2	2 3	—	2	6 3	—	3	2 —
4	—	1	11 1	—	2	3 1	—	2	7 1	—	3	2 3
5	—	1	11 2	—	2	3 3	—	2	7 3	—	3	3 1
6	—	2	—	—	2	4 —	—	2	8 —	—	3	3 3
7	—	2	—	—	2	4 2	—	2	8 2	—	3	4 1
8	—	2	—	—	2	4 3	—	2	9 —	—	3	4 3
9	—	2	—	—	2	5 1	—	2	9 2	—	3	5 1
80	—	2	1 1	—	2	5 2	—	2	9 3	—	3	6 —
1	—	2	1 2	—	2	5 3	—	2	10 1	—	3	6 2
2	—	2	1 3	—	2	6 1	—	2	10 3	—	3	7 —
3	—	2	2 1	—	2	6 2	—	2	11 —	—	3	7 2
4	—	2	2 2	—	2	7 —	—	2	11 2	—	3	8 —
5	—	2	2 3	—	2	7 1	—	3	—	—	3	8 2
6	—	2	3 —	—	2	7 3	—	3	—	—	3	9 —
7	—	2	3 2	—	2	8 —	—	3	—	—	3	9 2
8	—	2	3 3	—	2	8 2	—	3	1 1	—	3	10 —
9	—	2	4 —	—	2	8 3	—	3	1 3	—	3	10 2
90	—	2	4 1	—	2	9 1	—	3	2 —	—	3	11 1
1	—	2	4 3	—	2	9 2	—	3	2 2	—	3	11 3
2	—	2	5 —	—	2	10 —	—	3	3 —	—	4	—
3	—	2	5 1	—	2	10 1	—	3	3 1	—	4	—
4	—	2	5 3	—	2	10 3	—	3	3 3	—	4	1 1
5	—	2	6 —	—	2	11 —	—	3	4 —	—	4	1 3
6	—	2	6 1	—	2	11 1	—	3	4 2	—	4	2 1
7	—	2	6 2	—	2	11 3	—	3	5 —	—	4	3 —
8	—	2	7 —	—	3	—	—	3	5 1	—	4	3 2
9	—	2	7 1	—	3	—	—	3	5 3	—	4	4 —
100	—	2	7 2	—	3	—	—	3	6 —	—	4	4 2
200	—	5	3 1	—	6	1 2	—	7	—	—	8	5 1
300	—	7	10 3	—	9	2 1	—	10	6 —	—	13	1 3
400	—	10	6 1	—	12	3 1	—	14	—	—	17	6 2
500	—	13	1 3	—	15	4 —	—	17	6 1	—	3	1 11 —
600	—	15	9 2	—	18	4 3	—	1	1 —	—	1	6 3 2
700	—	18	5 —	—	1	1 5 2	—	1	4 6 2	—	1	10 8 1
800	—	1	1 —	—	1	4 6 1	—	1	8 —	—	1	15 1 —
900	—	1	3 8 —	—	1	7 7 1	—	1	11 6 2	—	1	19 5 2
1000	—	1	6 3 1	—	1	10 8 1	—	1	15 —	—	2	3 10 —
2000	—	2	12 7 2	—	3	1 4 2	—	3	10 1 2	—	4	7 8 —

SEVENTEEN DAYS.

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	1	—	—	2	—	—	2
2	—	—	2	—	—	3	—	—	3	—	—	1
3	—	—	1	—	—	1	—	—	1	—	—	1
4	—	—	1	—	—	1	—	—	1	—	—	2
5	—	—	1	—	—	2	—	—	2	—	—	2
6	—	—	2	—	—	2	—	—	2	—	—	3
7	—	—	2	—	—	2	—	—	3	—	—	3
8	—	—	2	—	—	3	—	—	3	—	—	4
9	—	—	3	—	—	3	—	—	4	—	—	5
10	—	—	3	—	—	3	—	—	4	—	—	5
11	—	—	3	—	—	4	—	—	5	—	—	6
12	—	—	4	—	—	4	—	—	5	—	—	6
13	—	—	4	—	—	5	—	—	6	—	—	7
14	—	—	4	—	—	5	—	—	6	—	—	7
15	—	—	5	—	—	5	—	—	6	—	—	8
16	—	—	5	—	—	6	—	—	7	—	—	9
17	—	—	5	—	—	6	—	—	7	—	—	9
18	—	—	6	—	—	6	—	—	8	—	—	10
19	—	—	6	—	—	7	—	—	8	—	—	10
20	—	—	6	—	—	7	—	—	9	—	—	11
1	—	—	7	—	—	8	—	—	9	—	—	11
2	—	—	7	—	—	8	—	—	9	—	—	1
3	—	—	7	—	—	9	—	—	10	—	—	1
4	—	—	8	—	—	9	—	—	10	—	—	1
5	—	—	8	—	—	9	—	—	11	—	—	1
6	—	—	9	—	—	10	—	—	11	—	—	1
7	—	—	9	—	—	10	—	—	1	—	—	1
8	—	—	9	—	—	10	—	—	2	—	—	1
9	—	—	10	—	—	11	—	—	1	—	—	1
30	—	—	10	—	—	11	—	—	1	—	—	1
1	—	—	10	—	—	11	—	—	1	—	—	1
2	—	—	11	—	—	1	—	—	1	—	—	1
3	—	—	11	—	—	1	—	—	2	—	—	1
4	—	—	11	—	—	1	—	—	3	—	—	1
5	—	—	1	—	—	1	—	—	3	—	—	1
6	—	—	1	—	—	2	—	—	4	—	—	1
7	—	—	1	—	—	2	—	—	4	—	—	1
8	—	—	1	—	—	2	—	—	5	—	—	1
9	—	—	1	—	—	3	—	—	5	—	—	1
40	—	—	1	—	—	3	—	—	6	—	—	1
1	—	—	1	—	—	4	—	—	6	—	—	1
2	—	—	1	—	—	4	—	—	7	—	—	1
3	—	—	1	—	—	4	—	—	7	—	—	2
4	—	—	1	—	—	5	—	—	8	—	—	2
5	—	—	1	—	—	5	—	—	8	—	—	2
6	—	—	1	—	—	6	—	—	9	—	—	2
7	—	—	1	—	—	6	—	—	9	—	—	2
8	—	—	1	—	—	6	—	—	9	—	—	2
9	—	—	1	—	—	7	—	—	10	—	—	2
50	—	—	1	—	—	7	—	—	10	—	—	2
1	—	—	1	—	—	7	—	—	10	—	—	2
2	—	—	1	—	—	8	—	—	11	—	—	2
3	—	—	1	—	—	8	—	—	11	—	—	2
4	—	—	1	—	—	9	—	—	1	—	—	2
5	—	—	1	—	—	9	—	—	1	—	—	2

SEVENTEEN DAYS.

395

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
36	—	1	7	—	1	9	—	2	1	—	2	7
7	—	1	7	—	1	10	—	2	1	—	2	8
8	—	1	7	—	1	10	—	2	2	—	2	8
9	—	1	8	—	1	11	—	2	2	—	2	9
60	—	1	8	—	1	11	—	2	2	—	2	9
1	—	1	8	—	2	—	—	2	3	—	2	10
2	—	1	8	—	2	—	1	—	2	—	2	10
3	—	1	9	—	2	—	2	—	2	—	2	11
4	—	1	9	—	2	1	—	—	2	—	2	11
5	—	1	9	—	2	1	1	—	2	—	3	—
6	—	1	10	—	2	1	3	—	2	—	3	—
7	—	1	10	—	2	2	—	—	2	—	3	1
8	—	1	10	—	2	2	2	—	2	—	3	2
9	—	1	11	—	2	2	3	—	2	—	3	2
70	—	1	11	—	2	3	1	—	2	—	3	3
1	—	1	11	—	2	3	3	—	2	—	3	3
2	—	2	—	—	2	4	—	—	2	—	3	4
3	—	2	—	—	2	4	2	—	2	—	3	4
4	—	2	—	3	—	2	4	3	—	—	3	5
5	—	2	1	—	2	5	—	—	2	—	3	5
6	—	2	1	2	—	2	5	2	—	—	3	6
7	—	2	1	3	—	2	6	—	—	—	3	7
8	—	2	2	—	2	6	1	—	—	—	3	7
9	—	2	2	2	—	2	6	3	—	—	3	8
80	—	2	2	3	—	2	7	—	—	—	3	8
1	—	2	3	—	2	7	2	—	3	—	3	9
2	—	2	3	2	—	2	7	3	—	—	3	9
3	—	2	3	3	—	2	8	—	3	—	3	10
4	—	2	4	—	—	2	8	2	—	—	3	11
5	—	2	4	2	—	2	8	3	—	—	3	11
6	—	2	4	3	—	2	9	1	—	—	4	—
7	—	2	5	—	—	2	9	2	—	—	4	—
8	—	2	5	2	—	2	10	—	—	—	4	1
9	—	2	5	3	—	2	10	2	—	—	4	1
90	—	2	6	—	—	2	11	—	—	—	4	2
1	—	2	6	2	—	2	11	2	—	—	4	2
2	—	2	6	3	—	2	11	3	—	—	4	3
3	—	2	7	—	—	3	—	1	—	—	4	4
4	—	2	7	2	—	3	—	2	—	—	4	4
5	—	2	7	3	—	3	1	—	—	—	4	5
6	—	2	8	1	—	3	1	2	—	—	4	5
7	—	2	8	2	—	3	1	3	—	—	4	6
8	—	2	8	3	—	3	2	—	—	—	4	6
9	—	2	9	1	—	3	2	2	—	—	4	7
100	—	2	9	2	—	3	3	—	—	—	4	8
200	—	5	7	—	—	6	6	1	—	—	9	3
300	—	8	4	2	—	9	9	1	—	—	13	11
400	—	11	2	1	—	13	—	2	—	—	18	7
500	—	13	11	3	—	16	3	2	—	—	1	3
600	—	16	9	1	—	19	6	3	—	—	1	7
700	—	19	6	3	—	1	2	9	3	—	1	12
800	—	1	2	4	1	—	1	6	1	—	1	17
900	—	1	5	1	3	—	1	9	4	—	2	1
1000	—	1	7	11	2	—	1	12	7	2	2	6
2000	—	2	15	10	3	—	3	5	2	—	4	13

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	2	—	—	2	—	—	2
2	—	—	3	—	—	3	—	—	1	—	—	1
3	—	—	1	—	—	1	—	—	1	—	—	1
4	—	—	1	—	—	1	—	—	2	—	—	2
5	—	—	1	—	—	2	—	—	2	—	—	3
6	—	—	2	—	—	2	—	—	3	—	—	3
7	—	—	2	—	—	3	—	—	3	—	—	4
8	—	—	2	—	—	3	—	—	3	—	—	4
9	—	—	3	—	—	3	—	—	4	—	—	5
10	—	—	3	—	—	4	—	—	4	—	—	6
11	—	—	3	—	—	4	—	—	5	—	—	6
12	—	—	4	—	—	5	—	—	5	—	—	7
13	—	—	4	—	—	5	—	—	6	—	—	7
14	—	—	4	—	—	5	—	—	6	—	—	8
15	—	—	5	—	—	6	—	—	7	—	—	8
16	—	—	5	—	—	6	—	—	7	—	—	9
17	—	—	6	—	—	7	—	—	8	—	—	10
18	—	—	6	—	—	7	—	—	8	—	—	10
19	—	—	6	—	—	8	—	—	9	—	—	11
20	—	—	7	—	—	8	—	—	9	—	—	11
1	—	—	7	—	—	8	—	—	10	—	—	1
2	—	—	7	—	—	9	—	—	10	—	—	3
3	—	—	8	—	—	9	—	—	11	—	—	1
4	—	—	8	—	—	10	—	—	11	—	—	2
5	—	—	8	—	—	10	—	—	1	—	—	2
6	—	—	9	—	—	11	—	—	1	—	—	3
7	—	—	9	—	—	11	—	—	1	—	—	3
8	—	—	9	—	—	11	—	—	1	—	—	4
9	—	—	10	—	—	1	—	—	1	—	—	5
10	—	—	10	—	—	1	—	—	2	—	—	5
11	—	—	10	—	—	3	—	—	2	—	—	6
12	—	—	11	—	—	1	—	—	3	—	—	7
13	—	—	11	—	—	1	—	—	3	—	—	7
14	—	—	11	—	—	2	—	—	4	—	—	8
15	—	—	1	—	—	2	—	—	4	—	—	8
16	—	—	1	—	—	2	—	—	5	—	—	9
17	—	—	1	—	—	3	—	—	5	—	—	9
18	—	—	1	—	—	3	—	—	6	—	—	10
19	—	—	1	—	—	4	—	—	6	—	—	10
20	—	—	1	—	—	4	—	—	7	—	—	11
1	—	—	1	—	—	5	—	—	7	—	—	2
2	—	—	1	—	—	5	—	—	8	—	—	2
3	—	—	1	—	—	5	—	—	8	—	—	1
4	—	—	1	—	—	6	—	—	9	—	—	1
5	—	—	1	—	—	6	—	—	9	—	—	2
6	—	—	1	—	—	7	—	—	10	—	—	2
7	—	—	1	—	—	7	—	—	10	—	—	3
8	—	—	1	—	—	8	—	—	11	—	—	4
9	—	—	1	—	—	8	—	—	11	—	—	4
10	—	—	1	—	—	8	—	—	11	—	—	5
11	—	—	1	—	—	9	—	—	2	—	—	6
12	—	—	1	—	—	9	—	—	2	—	—	6
13	—	—	1	—	—	10	—	—	2	—	—	7
14	—	—	1	—	—	10	—	—	2	—	—	7
15	—	—	1	—	—	10	—	—	2	—	—	8

EIGHTEEN DAYS.

397

L. at	3 per Cent.				3½ p. Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
56	—	1	7	3	—	1	11	1	—	2	2	2	—	2	9	—
7	—	1	8	—	—	1	11	2	—	2	3	—	—	2	9	2
8	—	1	8	2	—	2	—	—	—	2	3	2	—	2	10	1
9	—	1	8	3	—	2	—	2	—	2	4	—	—	2	11	3
60	—	1	9	1	—	2	—	3	—	2	4	2	—	2	11	2
1	—	1	9	2	—	2	1	1	—	2	5	—	—	3	—	—
2	—	1	9	3	—	2	1	3	—	2	5	2	—	3	—	2
3	—	1	10	1	—	2	2	—	—	2	6	—	—	3	1	1
4	—	1	10	2	—	2	2	2	—	2	6	2	—	3	1	3
5	—	1	10	3	—	2	3	—	—	2	7	—	—	3	2	2
6	—	1	11	1	—	2	3	2	—	2	7	2	—	3	3	—
7	—	1	11	2	—	2	3	3	—	2	8	—	—	3	3	2
8	—	2	—	—	—	2	4	1	—	2	8	2	—	3	4	1
9	—	2	—	1	—	2	4	3	—	2	9	—	—	3	4	3
70	—	2	—	3	—	2	5	—	—	2	9	1	—	3	5	2
1	—	2	1	—	—	2	5	2	—	2	9	3	—	3	6	—
2	—	2	1	1	—	2	6	—	—	2	10	1	—	3	6	3
3	—	2	1	3	—	2	6	1	—	2	10	3	—	3	7	1
4	—	2	2	—	—	2	6	3	—	2	11	1	—	3	7	3
5	—	2	2	2	—	2	7	1	—	2	11	3	—	3	8	1
6	—	2	2	3	—	2	7	2	—	2	—	—	—	3	8	3
7	—	2	3	1	—	2	8	—	—	3	—	2	—	3	9	2
8	—	2	3	2	—	2	8	2	—	3	1	—	—	3	10	1
9	—	2	4	—	—	2	8	3	—	3	1	2	—	3	10	3
80	—	2	4	1	—	2	9	1	—	3	2	—	—	3	11	1
1	—	2	4	3	—	2	9	3	—	3	2	2	—	4	—	—
2	—	2	5	—	—	2	10	—	—	3	3	—	—	4	—	2
3	—	2	5	2	—	2	10	2	—	3	3	2	—	4	1	—
4	—	2	5	3	—	2	11	—	—	3	4	—	—	4	1	3
5	—	2	6	1	—	2	11	1	—	3	4	2	—	4	2	1
6	—	2	6	2	—	3	11	3	—	3	5	—	—	4	3	—
7	—	2	7	—	—	3	—	1	—	3	5	1	—	4	3	2
8	—	2	7	1	—	3	—	3	—	3	5	3	—	4	4	—
9	—	2	7	2	—	3	1	—	—	3	6	1	—	4	4	3
90	—	2	8	—	—	3	1	2	—	3	6	2	—	4	5	1
1	—	2	8	1	—	3	2	—	—	3	7	—	—	4	5	3
2	—	2	8	3	—	3	2	1	—	3	7	2	—	4	6	2
3	—	2	9	—	—	3	2	3	—	3	8	—	—	4	7	—
4	—	2	9	2	—	3	3	1	—	3	8	2	—	4	7	3
5	—	2	9	3	—	3	3	2	—	3	9	—	—	4	8	1
6	—	2	10	—	—	3	4	—	—	3	9	2	—	4	8	3
7	—	2	10	2	—	3	4	1	—	3	10	—	—	4	9	2
8	—	2	10	3	—	3	4	3	—	3	10	2	—	4	10	—
9	—	2	11	—	—	3	5	1	—	3	11	—	—	4	10	2
100	—	2	11	2	—	3	5	2	—	3	11	1	—	4	11	1
200	—	5	11	—	—	6	11	—	—	7	10	3	—	9	10	1
300	—	8	10	2	—	10	4	1	—	11	10	—	—	14	9	2
400	—	11	10	—	—	13	9	3	—	15	9	1	—	19	8	3
500	—	14	9	2	—	17	3	—	—	19	9	2	—	1	4	7
600	—	17	9	—	—	1	—	8	2	1	3	8	2	1	9	7
700	1	—	8	3	1	4	2	—	—	1	7	7	1	1	14	6
800	1	3	8	—	1	7	7	1	—	1	11	7	—	1	19	5
900	1	6	7	2	1	11	—	3	—	1	15	6	1	2	4	4
1000	1	9	7	—	1	14	6	1	—	1	19	5	2	2	9	3
2000	2	19	2	2	3	9	—	2	—	3	18	10	—	4	18	7

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	—	1	—	—	2	—	—	2	—	—
2	—	—	—	3	—	—	3	—	—	1	—	—
3	—	—	1	—	—	1	1	—	—	1	—	—
4	—	—	1	2	—	—	1	3	—	2	—	—
5	—	—	1	3	—	—	2	1	—	2	2	—
6	—	—	2	1	—	—	2	2	—	3	—	—
7	—	—	2	2	—	—	3	—	—	3	2	—
8	—	—	3	—	—	—	3	2	—	4	—	—
9	—	—	3	1	—	—	3	3	—	4	2	—
10	—	—	3	3	—	—	4	1	—	5	—	—
11	—	—	4	—	—	—	4	3	—	5	2	—
12	—	—	4	2	—	—	5	—	—	6	—	—
13	—	—	5	—	—	—	5	2	—	6	2	—
14	—	—	5	1	—	—	6	—	—	7	—	—
15	—	—	5	3	—	—	6	2	—	7	2	—
16	—	—	6	—	—	—	6	3	—	8	—	—
17	—	—	6	2	—	—	7	1	—	8	2	—
18	—	—	6	3	—	—	7	3	—	9	—	—
19	—	—	7	1	—	—	8	1	—	9	2	—
20	—	—	7	2	—	—	8	3	—	10	—	—
1	—	—	8	—	—	—	9	1	—	10	2	—
2	—	—	8	1	—	—	9	2	—	11	—	—
3	—	—	8	3	—	—	10	—	—	11	2	—
4	—	—	9	—	—	—	10	1	—	1	—	—
5	—	—	9	2	—	—	10	3	—	1	2	—
6	—	—	9	3	—	—	11	1	—	1	1	—
7	—	—	10	1	—	—	1	11	3	1	12	—
8	—	—	10	2	—	—	1	—	—	1	2	—
9	—	—	11	—	—	—	1	—	2	1	2	2
30	—	—	11	1	—	—	1	1	—	1	3	—
1	—	—	11	3	—	—	1	1	2	1	3	2
2	—	1	—	—	—	—	1	1	3	1	4	—
3	—	1	—	2	—	—	1	2	1	1	4	2
4	—	1	—	3	—	—	1	2	3	1	5	—
5	—	1	1	1	—	—	1	3	—	1	5	2
6	—	1	1	2	—	—	1	3	2	1	6	—
7	—	1	2	—	—	—	1	4	—	1	6	2
8	—	1	2	1	—	—	1	4	2	1	7	—
9	—	1	2	3	—	—	1	5	—	1	7	2
40	—	1	3	—	—	—	1	5	2	1	8	—
1	—	1	3	2	—	—	1	6	—	1	8	2
2	—	1	3	3	—	—	1	6	1	1	9	—
3	—	1	4	—	—	—	1	6	3	1	9	2
4	—	1	4	2	—	—	1	7	1	1	10	—
5	—	1	5	—	—	—	1	7	3	1	10	2
6	—	1	5	1	—	—	1	8	1	1	11	—
7	—	1	5	3	—	—	1	8	3	1	11	2
8	—	1	6	—	—	—	1	9	—	2	—	—
9	—	1	6	2	—	—	1	9	2	2	—	2
50	—	1	6	3	—	—	1	10	—	2	1	—
1	—	1	7	1	—	—	1	10	1	2	1	2
2	—	1	7	2	—	—	1	10	3	2	2	—
3	—	1	8	1	—	—	1	11	1	2	2	2
4	—	1	8	1	—	—	1	11	3	2	3	—
5	—	1	8	3	—	—	2	—	1	2	3	2

NINETEEN DAYS.

399

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	9 —	—	2	— 2	—	2	4 —	—	2	11 —
7	—	1	9 2	—	2	1 —	—	2	4 2	—	2	11 2
8	—	1	9 3	—	2	1 2	—	2	5 —	—	3	— 1
9	—	1	10 1	—	2	2 —	—	2	5 2	—	3	— 3
60	—	1	10 3	—	2	2 2	—	2	6 —	—	3	1 2
1	—	1	11 —	—	2	2 3	—	2	6 2	—	3	2 —
2	—	1	11 2	—	2	3 1	—	2	7 —	—	3	2 3
3	—	1	11 3	—	2	3 3	—	2	7 2	—	3	3 2
4	—	2	— 1	—	2	4 1	—	2	8 —	—	3	4 —
5	—	2	— 2	—	2	4 3	—	2	8 2	—	3	4 3
6	—	2	1 —	—	2	5 —	—	2	9 —	—	3	5 1
7	—	2	1 1	—	2	5 2	—	2	9 2	—	3	6 —
8	—	2	1 3	—	2	6 —	—	2	10 —	—	3	6 2
9	—	2	2 —	—	2	6 2	—	2	10 2	—	3	7 —
70	—	2	2 1	—	2	6 3	—	2	11 —	—	3	7 3
1	—	2	2 3	—	2	7 1	—	2	11 2	—	3	8 1
2	—	2	3 —	—	2	7 3	—	3	— —	—	3	9 —
3	—	2	3 2	—	2	8 —	—	3	— 2	—	3	9 3
4	—	2	3 3	—	2	8 2	—	3	1 —	—	3	10 1
5	—	2	4 —	—	2	9 —	—	3	1 2	—	3	10 3
6	—	2	4 2	—	2	9 2	—	3	2 —	—	3	11 1
7	—	2	4 3	—	2	9 3	—	3	2 2	—	4	— —
8	—	2	5 1	—	2	10 1	—	3	3 —	—	4	— 3
9	—	2	5 2	—	2	10 2	—	3	3 2	—	4	1 1
80	—	2	6 —	—	2	11 —	—	3	4 —	—	4	2 —
1	—	2	6 1	—	2	11 2	—	3	4 2	—	4	2 2
2	—	2	6 3	—	3	— —	—	3	5 —	—	4	3 1
3	—	2	7 —	—	3	— 1	—	3	5 2	—	4	4 —
4	—	2	7 3	—	3	— 3	—	3	6 —	—	4	4 2
5	—	2	7 1	—	3	1 1	—	3	6 2	—	4	5 1
6	—	2	8 —	—	3	1 3	—	3	7 —	—	4	5 3
7	—	2	8 2	—	3	2 —	—	3	7 2	—	4	6 2
8	—	2	8 3	—	3	2 2	—	3	8 —	—	4	7 —
9	—	2	9 —	—	3	3 —	—	3	8 2	—	4	7 3
90	—	2	9 2	—	3	3 2	—	3	9 —	—	4	8 1
1	—	2	9 3	—	3	4 —	—	3	9 2	—	4	9 —
2	—	2	10 —	—	3	4 1	—	3	10 —	—	4	9 2
3	—	2	10 2	—	3	4 3	—	3	10 2	—	4	10 —
4	—	2	11 —	—	3	5 1	—	3	11 —	—	4	10 3
5	—	2	11 1	—	3	5 3	—	3	11 2	—	4	11 2
6	—	2	11 3	—	3	6 —	—	4	— —	—	5	— —
7	—	3	— 1	—	3	6 2	—	4	— 2	—	5	— 2
8	—	3	— 2	—	3	7 —	—	4	1 —	—	5	1 1
9	—	3	1 —	—	3	7 2	—	4	1 2	—	5	1 3
100	—	3	1 2	—	3	7 3	—	4	2 —	—	5	2 2
200	—	6	3 —	—	7	3 2	—	8	4 2	—	10	5 —
300	—	9	4 2	—	10	11 —	—	12	6 —	—	15	7 2
400	—	12	6 —	—	14	2 2	—	16	7 3	1	— 10 —	
500	—	15	7 1	—	18	6 3	1	— 9 3	1	6 — 2		
600	—	18	8 3	1	1	10 —	1	4 11 3	1	11 3 —		
700	1	1	10 1	1	5	5 3	1	9 1 3	1	16 5 1		
800	1	4	11 3	1	9	1 2	1	13 3 3	2	1 7 3		
900	1	8	1 1	1	12	9 1	1	17 5 3	2	6 10 —		
1000	1	11	2 3	1	16	5 1	2	1 7 3	2	12 — 2		
2000	3	2	5 2	3	12	10 2	2	3 3 2	5	4 1 1		

400

TWENTY DAYS.

L. at	3 per Cent.			3 1/2 per Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1	—	—	2	—	—	2	—	—	3
2	—	—	3	—	—	1	—	—	1	—	—	1
3	—	—	1 1	—	—	1 2	—	—	1 2	—	—	2
4	—	—	1 2	—	—	2	—	—	2	—	—	2 3
5	—	—	2	—	—	2 1	—	—	2 2	—	—	3
6	—	—	2 1	—	—	2 3	—	—	3	—	—	4
7	—	—	2 3	—	—	3 1	—	—	3 2	—	—	4
8	—	—	3 1	—	—	3 3	—	—	4	—	—	5
9	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6
10	—	—	4	—	—	4 3	—	—	5 1	—	—	6 2
11	—	—	4 1	—	—	5	—	—	5 3	—	—	7 1
12	—	—	4 3	—	—	5 2	—	—	6 1	—	—	8
13	—	—	5	—	—	6	—	—	6 3	—	—	8 2
14	—	—	5 2	—	—	6 2	—	—	7 1	—	—	9 1
15	—	—	5 3	—	—	7	—	—	7 3	—	—	10
16	—	—	6 1	—	—	7 2	—	—	8 1	—	—	10 2
17	—	—	6 2	—	—	8	—	—	8 3	—	—	11 1
18	—	—	7	—	—	8 1	—	—	9 2	—	—	1
19	—	—	7 2	—	—	8 3	—	—	10	—	—	1
20	—	—	8	—	—	9 1	—	—	10 2	—	—	1 1
1	—	—	8 1	—	—	9 3	—	—	11	—	—	1 1
2	—	—	8 3	—	—	10 1	—	—	11 2	—	—	2 2
3	—	—	9	—	—	10 3	—	—	1	—	—	1 3
4	—	—	9 2	—	—	11	—	—	1	—	—	1 3
5	—	—	10	—	—	11 2	—	—	1	—	—	1 4
6	—	—	10 1	—	—	1	—	—	1	—	—	1 5
7	—	—	10 3	—	—	1	—	—	1 2	—	—	1 5
8	—	—	11	—	—	1 1	—	—	1 2 2	—	—	1 6
9	—	—	11 2	—	—	1 1 2	—	—	1 3	—	—	1 7
30	—	—	11 3	—	—	1 1 3	—	—	1 3 3	—	—	1 7 3
1	—	—	1	—	—	1 2 1	—	—	1 4 1	—	—	1 8 2
2	—	—	1	—	—	1 2 3	—	—	1 4 3	—	—	1 9
3	—	—	1 1	—	—	1 3 1	—	—	1 5 1	—	—	1 9 3
4	—	—	1 1 1	—	—	1 3 3	—	—	1 5 3	—	—	1 10 2
5	—	—	1 1 3	—	—	1 4 1	—	—	1 6 2	—	—	1 11
6	—	—	1 2	—	—	1 4 2	—	—	1 7	—	—	1 11 3
7	—	—	1 2 2	—	—	1 5	—	—	1 7 2	—	—	2
8	—	—	1 2 3	—	—	1 5 2	—	—	1 8	—	—	2 1
9	—	—	1 3 1	—	—	1 6	—	—	1 8 2	—	—	2 1 2
40	—	—	1 3 3	—	—	1 6 1	—	—	1 9	—	—	2 2 1
1	—	—	1 4	—	—	1 6 3	—	—	1 9 2	—	—	2 3
2	—	—	1 4 2	—	—	1 7 1	—	—	1 10 1	—	—	2 3 3
3	—	—	1 5	—	—	1 7 2	—	—	1 10 3	—	—	2 4 1
4	—	—	1 5 1	—	—	1 8 1	—	—	1 11 1	—	—	2 5
5	—	—	1 5 3	—	—	1 8 2	—	—	1 11 3	—	—	2 5 3
6	—	—	1 6	—	—	1 9	—	—	2	—	—	2 6 1
7	—	—	1 6 2	—	—	1 9 2	—	—	2	—	—	2 7
8	—	—	1 6 3	—	—	1 10	—	—	2 1 1	—	—	2 7 3
9	—	—	1 7 1	—	—	1 10 2	—	—	2 1 3	—	—	2 8 1
50	—	—	1 7 2	—	—	1 11	—	—	2 2 1	—	—	2 9
1	—	—	1 8	—	—	1 11 1	—	—	2 3	—	—	2 9 3
2	—	—	1 8 2	—	—	1 11 3	—	—	2 3 2	—	—	2 10 1
3	—	—	1 8 3	—	—	2	—	—	2 4	—	—	2 11
4	—	—	1 9 1	—	—	2	—	—	2 4 2	—	—	2 11 3
5	—	—	1 9 3	—	—	2 1 1	—	—	2 5	—	—	3

TWENTY DAYS.

401

L. at	3 per Cent.			3 1/2 per Cent.			4 per Cent.			5 per Cent.			
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	
56	—	1	10	—	2	1	—	2	5	2	—	3	1
7	—	1	10	—	2	2	—	2	6	—	—	3	1
8	—	1	11	—	2	2	—	2	6	2	—	3	2
9	—	1	11	—	2	3	—	2	7	—	—	3	3
60	—	1	11	—	2	3	—	2	7	2	—	3	3
1	—	2	—	—	2	4	—	—	8	—	—	3	4
2	—	2	—	—	2	4	—	—	8	3	—	3	5
3	—	2	1	—	2	5	—	—	9	1	—	3	6
4	—	2	1	—	2	5	—	—	9	3	—	3	6
5	—	2	1	—	2	5	—	—	10	1	—	3	7
6	—	2	2	—	2	6	—	—	10	3	—	3	7
7	—	2	2	—	2	6	—	—	11	1	—	3	8
8	—	2	3	—	2	7	—	—	11	3	—	3	8
9	—	2	3	—	2	7	—	—	—	1	—	3	9
70	—	2	3	—	2	8	—	—	3	—	—	3	10
1	—	2	4	—	2	8	—	—	3	1	—	3	10
2	—	2	4	—	2	9	—	—	3	2	—	3	11
3	—	2	4	—	2	9	—	—	3	2	—	4	—
4	—	2	5	—	2	10	—	—	3	3	—	4	—
5	—	2	5	—	2	10	—	—	3	3	—	4	1
6	—	2	5	—	2	11	—	—	3	4	—	4	2
7	—	2	6	—	2	11	—	—	3	4	—	4	2
8	—	2	6	—	3	—	—	—	3	5	—	4	3
9	—	2	7	—	3	—	1	—	3	5	—	4	4
80	—	2	7	—	3	—	3	—	3	6	—	4	4
1	—	2	7	—	3	1	1	—	3	6	—	4	5
2	—	2	8	—	3	1	3	—	3	7	—	4	6
3	—	2	8	—	3	2	1	—	3	7	—	4	6
4	—	2	9	—	3	2	3	—	3	8	—	4	7
5	—	2	9	—	3	3	1	—	3	8	—	4	8
6	—	2	9	—	3	3	2	—	3	9	—	4	8
7	—	2	10	—	3	4	—	—	3	9	—	4	9
8	—	2	10	—	3	4	2	—	3	10	—	4	10
9	—	2	11	—	3	5	—	—	3	10	—	4	10
90	—	2	11	—	3	5	2	—	3	11	—	4	11
1	—	3	—	—	3	5	3	—	4	—	—	4	11
2	—	3	—	—	3	6	1	—	4	—	—	5	—
3	—	3	—	—	3	6	3	—	4	1	—	5	1
4	—	3	1	—	3	7	1	—	4	1	—	5	1
5	—	3	1	—	3	7	3	—	4	2	—	5	2
6	—	3	1	—	3	8	1	—	4	2	—	5	3
7	—	3	2	—	3	8	3	—	4	3	—	5	3
8	—	3	2	—	3	9	1	—	4	3	—	5	4
9	—	3	3	—	3	9	2	—	4	4	—	5	5
100	—	3	3	—	3	10	—	—	4	4	—	5	5
200	—	6	7	—	7	8	—	—	8	9	—	10	11
300	—	9	10	—	11	6	—	—	13	1	—	16	5
400	—	13	1	—	15	4	—	—	17	6	—	1	1
500	—	16	5	—	19	2	—	1	1	11	—	1	7
600	—	19	8	—	1	3	—	1	6	3	—	1	12
700	1	3	—	1	6	10	1	1	10	8	—	1	18
800	1	6	3	1	10	8	1	1	15	—	3	2	3
900	1	9	7	1	14	6	1	1	19	5	—	2	9
1000	1	12	10	1	18	4	1	2	3	10	—	2	14
2000	3	15	9	3	16	8	2	4	7	8	—	5	9

L. at	3 per Cent.			3 1/2 per Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	2	—	—	2	—	—	2	—	—	3
2	—	—	3	—	—	3	—	—	1	—	—	1
3	—	—	1 1	—	—	1 2	—	—	1 2	—	—	2
4	—	—	1 2	—	—	2 2	—	—	2 1	—	—	2 3
5	—	—	2	—	—	2 2	—	—	2 3	—	—	3 1
6	—	—	2 2	—	—	3	—	—	3 1	—	—	4
7	—	—	2 3	—	—	3 2	—	—	3 3	—	—	4 3
8	—	—	3 1	—	—	4	—	—	4 2	—	—	5 2
9	—	—	3 3	—	—	4 2	—	—	5	—	—	6
10	—	—	4	—	—	4 3	—	—	5 2	—	—	6 3
11	—	—	4 2	—	—	5 1	—	—	6	—	—	7 2
12	—	—	5	—	—	5 3	—	—	6 3	—	—	8
13	—	—	5 1	—	—	6 1	—	—	7 1	—	—	8 3
14	—	—	5 3	—	—	6 3	—	—	7 3	—	—	9 2
15	—	—	6 1	—	—	7 1	—	—	8 1	—	—	10 1
16	—	—	6 2	—	—	7 3	—	—	9	—	—	11
17	—	—	7	—	—	8 1	—	—	9 2	—	—	11 2
18	—	—	7 2	—	—	8 3	—	—	10	—	—	1
19	—	—	7 3	—	—	9 1	—	—	10 2	—	—	1 1
20	—	—	8 1	—	—	9 3	—	—	11	—	—	1 3
1	—	—	8 3	—	—	10	—	—	11 3	—	—	2 2
2	—	—	9	—	—	10 2	—	—	1	—	—	3
3	—	—	9 2	—	—	11	—	—	1	—	—	3 3
4	—	—	10	—	—	11 2	—	—	1 1 1	—	—	4 2
5	—	—	10 1	—	—	1	—	—	2	—	—	5
6	—	—	10 3	—	—	1 2	—	—	1 2 2	—	—	5 3
7	—	—	11 1	—	—	1 1	—	—	1 3	—	—	6 2
8	—	—	11 2	—	—	1 2	—	—	1 3 2	—	—	7 1
9	—	—	1	—	—	2	—	—	1 4	—	—	8
10	—	—	1 2	—	—	2 2	—	—	1 4 3	—	—	8 3
1	—	—	1 3	—	—	3	—	—	1 5 1	—	—	9 1
2	—	—	1 1	—	—	3 2	—	—	1 5 3	—	—	10
3	—	—	1 2	—	—	4	—	—	1 6 1	—	—	10 3
4	—	—	1 2	—	—	4 2	—	—	1 6 3	—	—	11 2
5	—	—	1 2 2	—	—	4	—	—	1 7 1	—	—	—
6	—	—	1 2 3	—	—	5 2	—	—	1 7 3	—	—	3
7	—	—	1 3 1	—	—	5 3	—	—	1 8 2	—	—	1 2
8	—	—	1 3 3	—	—	6 1	—	—	1 9	—	—	2 1
9	—	—	1 4	—	—	6 3	—	—	1 9 2	—	—	3
10	—	—	1 4 2	—	—	7 1	—	—	1 10	—	—	3 2
1	—	—	1 5	—	—	7 3	—	—	1 10 3	—	—	4 1
2	—	—	1 5 1	—	—	8 1	—	—	1 11 1	—	—	5
3	—	—	1 5 3	—	—	8 3	—	—	1 11 3	—	—	5 3
4	—	—	1 6 1	—	—	9 1	—	—	2	—	—	6 2
5	—	—	1 6 2	—	—	9 3	—	—	2 1	—	—	7
6	—	—	1 7	—	—	10 1	—	—	2 1 2	—	—	7 3
7	—	—	1 7 2	—	—	10 3	—	—	2 2	—	—	8 2
8	—	—	1 7 3	—	—	11 1	—	—	2 2 2	—	—	9 1
9	—	—	1 8 1	—	—	11 2	—	—	2 3	—	—	10
10	—	—	1 8 3	—	—	2	—	—	2 3 2	—	—	10 2
1	—	—	1 9	—	—	2 2	—	—	2 4	—	—	11 1
2	—	—	1 9 2	—	—	2 1	—	—	2 4 3	—	—	—
3	—	—	1 10	—	—	2 1 2	—	—	2 5 1	—	—	3
4	—	—	1 10 1	—	—	2 2	—	—	2 5 3	—	—	1 2
5	—	—	1 10 3	—	—	2 2 2	—	—	2 6 1	—	—	2 1

TWENTY-ONE DAYS.

403

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	1	11 1	—	2	3 —	—	2	7 —	—	3	2 3
7	—	1	11 2	—	2	3 2	—	2	7 2	—	3	3 2
8	—	2	— —	—	2	4 —	—	2	8 —	—	3	4 1
9	—	2	— 2	—	2	4 2	—	2	8 2	—	3	5 —
60	—	2	— 3	—	2	5 —	—	2	9 1	—	3	5 2
1	—	2	1 1	—	2	5 2	—	2	9 3	—	3	6 1
2	—	2	1 3	—	2	6 —	—	2	10 1	—	3	7 —
3	—	2	2 —	—	2	6 2	—	2	10 3	—	3	7 3
4	—	2	2 2	—	2	7 —	—	2	11 2	—	3	8 1
5	—	2	3 —	—	2	7 2	—	3	— —	—	3	9 —
6	—	2	3 1	—	2	8 —	—	3	— 2	—	3	9 3
7	—	2	3 3	—	2	8 2	—	3	1 —	—	3	10 2
8	—	2	4 —	—	2	9 —	—	3	1 2	—	3	11 —
9	—	2	4 2	—	2	9 2	—	3	2 —	—	3	11 2
70	—	2	5 —	—	2	10 —	—	3	2 3	—	4	— 2
1	—	2	5 1	—	2	10 2	—	3	3 1	—	4	1 —
2	—	2	5 3	—	2	11 —	—	3	3 3	—	4	1 3
3	—	2	6 1	—	2	11 2	—	3	4 1	—	4	2 2
4	—	2	6 2	—	3	— —	—	3	4 3	—	4	3 —
5	—	2	7 —	—	3	— 1	—	3	5 2	—	4	3 3
6	—	2	7 2	—	3	— 3	—	3	6 —	—	4	4 2
7	—	2	7 3	—	3	1 —	—	3	6 2	—	4	5 1
8	—	2	8 1	—	3	1 3	—	3	7 —	—	4	6 —
9	—	2	8 3	—	3	2 1	—	3	7 2	—	4	6 2
80	—	2	9 —	—	3	2 3	—	3	8 1	—	4	7 —
1	—	2	9 2	—	3	3 —	—	3	8 3	—	4	8 1
2	—	2	10 —	—	3	3 3	—	3	9 1	—	4	8 3
3	—	2	10 2	—	3	4 —	—	3	9 3	—	4	9 —
4	—	2	10 3	—	3	4 2	—	3	10 2	—	4	10 —
5	—	2	11 1	—	3	5 —	—	3	11 —	—	4	10 3
6	—	2	11 3	—	3	5 2	—	3	11 2	—	4	11 2
7	—	3	— 1	—	3	6 —	—	4	— —	—	5	— —
8	—	3	— 2	—	3	6 2	—	4	1 —	—	5	1 3
9	—	3	1 —	—	3	7 —	—	4	1 3	—	5	2 —
90	—	3	1 2	—	3	7 2	—	4	2 1	—	5	3 —
1	—	3	1 3	—	3	8 —	—	4	2 3	—	5	3 2
2	—	3	2 1	—	3	8 2	—	4	3 —	—	5	4 1
3	—	3	2 3	—	3	9 —	—	4	3 3	—	5	5 —
4	—	3	3 —	—	3	9 1	—	4	4 2	—	5	5 3
5	—	3	3 2	—	3	9 3	—	4	5 —	—	5	6 2
6	—	3	3 3	—	3	10 1	—	4	5 2	—	5	7 —
7	—	3	4 —	—	3	10 3	—	4	6 —	—	5	7 3
8	—	3	4 2	—	3	11 1	—	4	6 2	—	5	8 2
9	—	3	5 —	—	3	11 3	—	4	7 1	—	5	9 —
100	—	3	5 2	—	4	— 1	—	9	2 2	—	11	6 —
200	—	6	10 3	—	8	— 2	—	9	2 2	—	11	6 —
300	—	10	4 1	—	12	1 —	—	13	9 3	—	17	3 —
400	—	13	9 3	—	16	1 1	—	18	5 —	—	1	3 —
500	—	17	3 —	—	1	1 2	—	1	3 —	—	1	8 9 1
600	—	1	8 2	—	1	4 2 —	—	1	7 7 1	—	1	14 6 1
700	—	1	4 2 —	—	1	8 2 1	—	1	12 2 2	—	2	6 3 1
800	—	1	7 7 2	—	1	12 2 2	—	1	16 9 3	—	2	6 1 1
900	—	1	11 1 —	—	1	16 3 —	—	2	1 5 —	—	2	11 9 1
1000	—	1	14 6 1	—	2	— 3 1	—	2	6 — 1	—	2	17 6 2
2000	—	1	9 — 2	—	4	— 6 2	—	4	12 — 2	—	5	15 — 3

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	2	—	—	2	—	—	2	—	—	3
2	—	—	1	—	—	1	—	—	1 1	—	—	1 2
3	—	—	1 1	—	—	1 2	—	—	1 3	—	—	2 1
4	—	—	1 3	—	—	2 1	—	—	2 1	—	—	3 —
5	—	—	2 1	—	—	2 2	—	—	3 —	—	—	3 3
6	—	—	2 2	—	—	3 —	—	—	3 2	—	—	4 1
7	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5 —
8	—	—	3 2	—	—	4 —	—	—	4 3	—	—	5 3
9	—	—	3 3	—	—	4 2	—	—	5 1	—	—	6 2
10	—	—	4 1	—	—	5 —	—	—	6 —	—	—	7 1
11	—	—	4 3	—	—	5 2	—	—	6 2	—	—	8 —
12	—	—	5 1	—	—	6 —	—	—	7 —	—	—	8 2
13	—	—	5 3	—	—	6 2	—	—	7 2	—	—	9 1
14	—	—	6 —	—	—	7 —	—	—	8 1	—	—	10 —
15	—	—	6 2	—	—	7 2	—	—	9 —	—	—	10 3
16	—	—	7 —	—	—	8 —	—	—	9 2	—	—	11 2
17	—	—	7 2	—	—	8 2	—	—	10 —	—	—	11 —
18	—	—	8 —	—	—	9 —	—	—	10 3	—	—	12 3
19	—	—	8 1	—	—	9 2	—	—	11 1	—	—	13 2
20	—	—	8 3	—	—	10 1	—	—	11 3	—	—	14 1
1	—	—	9 1	—	—	10 3	—	—	12 1	—	—	15 3
2	—	—	9 3	—	—	11 1	—	—	13 1	—	—	16 3
3	—	—	10 1	—	—	11 3	—	—	14 2	—	—	17 4
4	—	—	10 2	—	—	12 1	—	—	15 2	—	—	18 5
5	—	—	11 —	—	—	13 —	—	—	16 3	—	—	19 5
6	—	—	11 2	—	—	14 1	—	—	17 3	—	—	20 6
7	—	—	—	—	—	15 1	—	—	18 3	—	—	21 7
8	—	—	1	—	—	16 3	—	—	19 4	—	—	22 8
9	—	—	1 3	—	—	17 3	—	—	20 5	—	—	23 8
10	—	—	1 1	—	—	18 3	—	—	21 6	—	—	24 9
11	—	—	1 2	—	—	19 4	—	—	22 7	—	—	25 10
12	—	—	1 2	—	—	20 4	—	—	23 7	—	—	26 11
13	—	—	1 2 2	—	—	21 5	—	—	24 8	—	—	27 12
14	—	—	1 2 3	—	—	22 5	—	—	25 8	—	—	28 1
15	—	—	1 3 1	—	—	23 6	—	—	26 9	—	—	29 2
16	—	—	1 3 3	—	—	24 6	—	—	27 9	—	—	30 3
17	—	—	1 4 —	—	—	25 7	—	—	28 10	—	—	31 4
18	—	—	1 4 2	—	—	26 7	—	—	29 10	—	—	32 5
19	—	—	1 5 —	—	—	27 8	—	—	30 11	—	—	33 6
20	—	—	1 5 2	—	—	28 8	—	—	31 11	—	—	34 7
1	—	—	1 5 3	—	—	29 9	—	—	32 12	—	—	35 8
2	—	—	1 6 1	—	—	30 9	—	—	33 1	—	—	36 9
3	—	—	1 6 3	—	—	31 10	—	—	34 2	—	—	37 10
4	—	—	1 7 —	—	—	32 10	—	—	35 3	—	—	38 11
5	—	—	1 7 2	—	—	33 11	—	—	36 4	—	—	39 12
6	—	—	1 8 —	—	—	34 11	—	—	37 5	—	—	40 1
7	—	—	1 8 2	—	—	35 12	—	—	38 6	—	—	41 2
8	—	—	1 8 3	—	—	36 1	—	—	39 7	—	—	42 3
9	—	—	1 9 1	—	—	37 2	—	—	40 8	—	—	43 4
10	—	—	1 9 3	—	—	38 3	—	—	41 9	—	—	44 5
11	—	—	1 10 —	—	—	39 4	—	—	42 10	—	—	45 6
12	—	—	1 10 2	—	—	40 5	—	—	43 11	—	—	46 7
13	—	—	1 11 —	—	—	41 6	—	—	44 12	—	—	47 8
14	—	—	1 11 2	—	—	42 7	—	—	45 1	—	—	48 9
15	—	—	2 —	—	—	43 8	—	—	46 2	—	—	49 10

TWENTY-TWO DAYS.

405

L. at	3 per Cent.			3 ½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	— 1	—	2	4 1	—	2	8 2	—	3	4 2
7	—	2	— 3	—	2	4 3	—	2	9 —	—	3	5 —
8	—	2	1 1	—	2	5 1	—	2	9 2	—	3	5 3
9	—	2	1 3	—	2	5 3	—	2	10 1	—	3	6 2
60	—	2	2 —	—	2	6 1	—	2	10 3	—	3	7 —
1	—	2	2 2	—	2	6 3	—	2	11 1	—	3	7 3
2	—	2	3 —	—	2	7 1	—	2	11 3	—	3	8 2
3	—	2	3 2	—	2	7 3	—	3	— 2	—	3	9 1
4	—	2	3 3	—	2	8 1	—	3	1 —	—	3	10 —
5	—	2	4 1	—	2	8 3	—	3	1 2	—	3	11 3
6	—	2	4 3	—	2	9 1	—	3	2 —	—	3	11 2
7	—	2	5 1	—	2	9 3	—	3	2 3	—	4	— 1
8	—	2	5 2	—	2	10 2	—	3	3 1	—	4	1 —
9	—	2	6 —	—	2	11 —	—	3	3 3	—	4	1 3
70	—	2	6 2	—	2	11 2	—	3	4 2	—	4	2 2
1	—	2	7 —	—	3	—	—	3	5 —	—	4	3 1
2	—	2	7 1	—	3	— 2	—	3	5 2	—	4	4 —
3	—	2	7 3	—	3	1 —	—	3	6 1	—	4	4 3
4	—	2	8 1	—	3	1 2	—	3	6 3	—	4	5 2
5	—	2	8 3	—	3	2 —	—	3	7 1	—	4	6 1
6	—	2	9 —	—	3	2 2	—	3	8 —	—	4	6 —
7	—	2	9 2	—	3	3 —	—	3	8 2	—	4	7 3
8	—	2	10 —	—	3	3 2	—	3	9 —	—	4	8 2
9	—	2	10 2	—	3	4 —	—	3	9 2	—	4	8 —
80	—	2	10 3	—	3	4 2	—	3	10 1	—	4	9 3
1	—	2	11 1	—	3	5 —	—	3	11 3	—	4	10 2
2	—	2	11 3	—	3	5 2	—	3	11 1	—	4	11 1
3	—	3	— 1	—	3	6 —	—	4	—	—	5	—
4	—	3	— 2	—	3	6 2	—	4	— 2	—	5	— 3
5	—	3	1 —	—	3	7 —	—	4	1 —	—	5	1 2
6	—	3	1 2	—	3	7 2	—	4	1 2	—	5	2 1
7	—	3	2 —	—	3	8 —	—	4	2 1	—	5	3 —
8	—	3	2 1	—	3	8 2	—	4	2 3	—	5	3 3
9	—	3	2 3	—	3	9 —	—	4	3 1	—	5	4 2
90	—	3	3 —	—	3	9 2	—	4	4 —	—	5	5 1
1	—	3	3 2	—	3	10 —	—	4	4 2	—	5	6 —
2	—	3	4 —	—	3	10 2	—	4	5 —	—	5	6 2
3	—	3	4 2	—	3	11 —	—	4	5 3	—	5	7 1
4	—	3	5 —	—	3	11 2	—	4	6 1	—	5	8 —
5	—	3	5 1	—	4	—	—	4	6 3	—	5	8 3
6	—	3	5 3	—	4	— 2	—	4	7 2	—	5	9 2
7	—	3	6 1	—	4	1 —	—	4	8 —	—	5	10 1
8	—	3	6 3	—	4	1 2	—	4	8 2	—	5	11 —
9	—	3	7 —	—	4	2 —	—	4	9 1	—	5	11 2
100	—	3	7 2	—	4	2 3	—	4	9 3	—	6	— 1
200	—	7	2 3	—	8	5 1	—	9	7 2	—	12	— 2
300	—	10	10 1	—	12	7 3	—	14	5 2	—	18	— 3
400	—	15	5 2	—	16	10 2	—	19	3 1	—	1	4 1 1
500	—	18	— 3	—	1	1 1 1	—	1	4 1 1	—	1	10 1 2
600	1	1	8 1	1	5	3 3	1	8	11 —	1	16	1 3
700	1	5	3 3	1	9	6 2	1	13	8 2	2	2	2 1
800	1	8	11 —	1	13	9 1	1	18	6 3	2	8	2 2
900	1	12	6 2	1	17	11 3	2	3	4 2	2	14	2 3
1000	1	16	2 —	2	2	2 1	2	8	2 2	3	—	3 1
2000	3	12	4 —	4	4	4 3	4	16	5 1	6	—	6 2

406 TWENTY THREE DAYS.

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	— 2	—	—	— 2	—	—	— 2	—	—	— 3
2	—	—	— 3	—	—	— 1	—	—	— 1 1	—	—	— 12
3	—	—	— 1 1	—	—	— 1 2	—	—	— 1 3	—	—	— 2 1
4	—	—	— 1 3	—	—	— 2	—	—	— 2 1	—	—	— 3
5	—	—	— 2 1	—	—	— 2 2	—	—	— 3	—	—	— 3 3
6	—	—	— 2 3	—	—	— 3 1	—	—	— 3 2	—	—	— 4 2
7	—	—	— 3	—	—	— 3 3	—	—	— 4	—	—	— 5 1
8	—	—	— 3 2	—	—	— 4 1	—	—	— 4 3	—	—	— 6
9	—	—	— 4	—	—	— 4 3	—	—	— 5 1	—	—	— 6 3
10	—	—	— 4 2	—	—	— 5 1	—	—	— 6	—	—	— 7 2
11	—	—	— 5	—	—	— 5 3	—	—	— 6 2	—	—	— 8 1
12	—	—	— 5 1	—	—	— 6 1	—	—	— 7	—	—	— 9
13	—	—	— 5 3	—	—	— 7	—	—	— 7 3	—	—	— 9 3
14	—	—	— 6 1	—	—	— 7 2	—	—	— 8 1	—	—	— 10 2
15	—	—	— 6 3	—	—	— 8	—	—	— 8 3	—	—	— 11 1
16	—	—	— 7 1	—	—	— 8 2	—	—	— 9 2	—	—	— 1
17	—	—	— 7 2	—	—	— 9	—	—	— 10	—	—	— 3
18	—	—	— 8	—	—	— 9 2	—	—	— 10 3	—	—	— 1 12
19	—	—	— 8 2	—	—	— 10	—	—	— 11 1	—	—	— 1 2 1
20	—	—	— 9	—	—	— 10 2	—	—	— 1	—	—	— 3
1	—	—	— 9 2	—	—	— 11	—	—	— 1	—	—	— 3 3
2	—	—	— 10	—	—	— 11 3	—	—	— 1 1 1	—	—	— 1 4 2
3	—	—	— 10 1	—	—	— 1	—	—	— 1 2	—	—	— 1 5 1
4	—	—	— 10 3	—	—	— 1	—	—	— 1 2 2	—	—	— 1 6
5	—	—	— 11 1	—	—	— 1 1 1	—	—	— 1 3 1	—	—	— 1 6 3
6	—	—	— 11 3	—	—	— 1 1 3	—	—	— 1 3 3	—	—	— 1 7 2
7	—	—	— 1	—	—	— 1 2 1	—	—	— 1 4 1	—	—	— 1 8 2
8	—	—	— 1	—	—	— 1 2 3	—	—	— 1 4 3	—	—	— 1 9 1
9	—	—	— 1 1	—	—	— 1 3 1	—	—	— 1 5 2	—	—	— 1 10
30	—	—	— 1 1 2	—	—	— 1 4	—	—	— 1 6	—	—	— 1 11 3
1	—	—	— 1 2	—	—	— 1 4 2	—	—	— 1 6 3	—	—	— 1 11 2
2	—	—	— 1 2 2	—	—	— 1 5	—	—	— 1 7 1	—	—	— 2
3	—	—	— 1 3	—	—	— 1 5 2	—	—	— 1 8	—	—	— 2 1
4	—	—	— 1 3 2	—	—	— 1 6	—	—	— 1 8 2	—	—	— 2 1 3
5	—	—	— 1 3 3	—	—	— 1 6 2	—	—	— 1 9 1	—	—	— 2 2 2
6	—	—	— 1 4 1	—	—	— 1 7	—	—	— 1 9 3	—	—	— 2 3 1
7	—	—	— 1 4 3	—	—	— 1 7 2	—	—	— 1 10 2	—	—	— 2 4
8	—	—	— 1 5 1	—	—	— 1 8	—	—	— 1 11	—	—	— 2 4 3
9	—	—	— 1 5 3	—	—	— 1 8 2	—	—	— 1 11 3	—	—	— 2 5 2
40	—	—	— 1 6 1	—	—	— 1 9 1	—	—	— 2	—	—	— 2 6 1
1	—	—	— 1 6 2	—	—	— 1 9 3	—	—	— 2	—	—	— 2 7
2	—	—	— 1 7	—	—	— 1 10 1	—	—	— 2 1 2	—	—	— 2 7 3
3	—	—	— 1 7 2	—	—	— 1 10 3	—	—	— 2 2	—	—	— 2 8 2
4	—	—	— 1 8	—	—	— 1 11 1	—	—	— 2 2 2	—	—	— 2 9 1
5	—	—	— 1 8 2	—	—	— 1 11 3	—	—	— 2 3 1	—	—	— 2 10
6	—	—	— 1 8 3	—	—	— 2	—	—	— 2 3 3	—	—	— 2 10 3
7	—	—	— 1 9 1	—	—	— 2	—	—	— 2 4 2	—	—	— 2 11 2
8	—	—	— 1 9 3	—	—	— 2 1 2	—	—	— 2 5	—	—	— 3
9	—	—	— 1 10 1	—	—	— 2 2	—	—	— 2 5 3	—	—	— 3 1
50	—	—	— 1 10 3	—	—	— 2 2 2	—	—	— 2 6 1	—	—	— 3 1 3
1	—	—	— 1 11	—	—	— 2 3	—	—	— 2 6 3	—	—	— 3 2 2
2	—	—	— 1 11 2	—	—	— 2 3 2	—	—	— 2 7 1	—	—	— 3 3 1
3	—	—	— 2	—	—	— 2 4	—	—	— 2 8	—	—	— 3 4
4	—	—	— 2	—	—	— 2 4 2	—	—	— 2 8 2	—	—	— 3 4 3
5	—	—	— 2 1	—	—	— 2 5	—	—	— 2 9 1	—	—	— 3 5 2

TWENTY-THREE DAYS.

407

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	1 1	—	2	5 2	—	2	9 3	—	3	6 1
7	—	2	1 3	—	2	6 —	—	2	10 1	—	3	7 —
8	—	2	2 1	—	2	6 2	—	2	11 —	—	3	7 3
9	—	2	2 3	—	2	7 1	—	2	11 2	—	3	8 2
60	—	2	3 1	—	2	7 3	—	3	— 1	—	3	9 2
1	—	2	3 3	—	2	8 1	—	3	— 3	—	3	10 1
2	—	2	4 —	—	2	8 3	—	3	1 2	—	3	11 —
3	—	2	4 2	—	2	9 1	—	3	2 —	—	3	11 3
4	—	2	5 —	—	2	9 3	—	3	2 3	—	4	— 2
5	—	2	5 2	—	2	10 1	—	3	3 1	—	4	1 1
6	—	2	6 —	—	2	11 —	—	3	4 —	—	4	2 —
7	—	2	6 2	—	2	11 2	—	3	4 2	—	4	2 3
8	—	2	6 3	—	3	— —	—	3	5 1	—	4	3 2
9	—	2	7 1	—	3	— 2	—	3	5 3	—	4	4 1
70	—	2	7 3	—	3	1 —	—	3	6 1	—	4	5 —
1	—	2	8 —	—	3	1 2	—	3	7 —	—	4	5 3
2	—	2	8 2	—	3	2 1	—	3	7 2	—	4	6 2
3	—	2	9 —	—	3	2 3	—	3	8 1	—	4	7 1
4	—	2	9 2	—	3	3 1	—	3	8 3	—	4	8 —
5	—	2	10 —	—	3	3 3	—	3	9 2	—	4	8 3
6	—	2	10 1	—	3	4 1	—	3	10 —	—	4	9 2
7	—	2	10 3	—	3	4 3	—	3	10 3	—	4	10 1
8	—	2	11 1	—	3	5 1	—	3	11 1	—	4	11 —
9	—	2	11 3	—	3	5 2	—	4	11 3	—	4	11 3
80	—	3	— 1	—	3	6 3	—	4	— 2	—	5	— 2
1	—	3	— 2	—	3	7 —	—	4	1 —	—	5	1 1
2	—	3	1 —	—	3	7 2	—	4	1 3	—	5	2 —
3	—	3	1 2	—	3	8 —	—	4	2 1	—	5	2 3
4	—	3	2 —	—	3	8 2	—	4	3 —	—	5	3 2
5	—	3	2 2	—	3	9 —	—	4	3 2	—	5	4 1
6	—	3	3 —	—	3	9 2	—	4	4 1	—	5	5 —
7	—	3	3 2	—	3	10 —	—	4	4 3	—	5	5 3
8	—	3	3 3	—	3	10 3	—	4	5 1	—	5	6 2
9	—	3	4 1	—	3	11 1	—	4	6 —	—	5	7 1
90	—	3	4 3	—	3	11 3	—	4	6 2	—	5	8 —
1	—	3	5 1	—	4	— 1	—	4	7 —	—	5	8 3
2	—	3	5 3	—	4	— 3	—	4	7 3	—	5	9 2
3	—	3	6 1	—	4	1 1	—	4	8 1	—	5	10 1
4	—	3	6 3	—	4	1 3	—	4	9 —	—	5	11 —
5	—	3	7 —	—	4	2 2	—	4	9 2	—	5	11 3
6	—	3	7 2	—	4	3 —	—	4	10 1	—	6	— 2
7	—	3	8 —	—	4	3 2	—	4	10 3	—	6	1 1
8	—	3	8 2	—	4	4 —	—	4	11 2	—	6	2 —
9	—	3	9 —	—	4	4 2	—	5	— —	—	6	2 3
100	—	3	9 2	—	4	5 —	—	5	— 2	—	6	3 2
200	—	7	6 3	—	8	10 —	—	10	1 —	—	12	7 1
300	—	11	4 1	—	13	2 3	—	15	1 2	—	18	10 3
400	—	15	1 2	—	17	7 3	—	1	— 2	—	1	5 2 2
500	—	18	11 —	—	1	2 — 3	—	1	5 2 2	—	1	11 6 —
600	1	6	8 1	1	6	5 3	1	10	3 —	1	17	9 2
700	1	2	5 3	1	10	10 2	1	15	3 2	2	4	1 1
800	1	10	3 —	1	15	3 2	2	—	4 —	2	10	5 —
900	1	14	— 2	1	19	8 2	2	5	4 2	2	16	8 2
1000	1	17	9 3	2	4	1 1	2	10	5 —	3	3	— —
2000	3	15	7 2	4	8	2 3	5	—	10 —	6	6	— 1

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	2	—	—	—	—	—	—	—	—	3
2	—	—	1	—	—	1	—	—	1	—	—	2
3	—	—	2	—	—	1	2	—	1	3	—	2
4	—	—	2	—	—	2	1	—	2	2	—	3
5	—	—	2	—	—	2	3	—	3	—	—	4
6	—	—	3	—	—	3	1	—	3	3	—	4
7	—	—	3	—	—	3	3	—	4	1	—	5
8	—	—	4	—	—	4	2	—	5	—	—	6
9	—	—	4	—	—	5	—	—	5	2	—	7
10	—	—	4	—	—	5	2	—	6	1	—	7
11	—	—	5	—	—	6	—	—	6	3	—	8
12	—	—	5	—	—	6	3	—	7	2	—	9
13	—	—	6	—	—	7	1	—	8	—	—	10
14	—	—	6	—	—	7	3	—	8	3	—	11
15	—	—	7	—	—	8	1	—	9	1	—	11
16	—	—	7	—	—	9	—	—	10	—	—	2
17	—	—	8	—	—	9	2	—	10	2	—	1
18	—	—	8	—	—	10	—	—	11	1	—	2
19	—	—	9	—	—	10	2	—	11	3	—	3
20	—	—	9	—	—	11	—	—	1	—	—	3
1	—	—	10	—	—	11	2	—	1	1	—	4
2	—	—	10	—	—	1	—	—	1	1	3	5
3	—	—	11	—	—	1	—	—	1	2	2	6
4	—	—	11	—	—	1	1	—	1	3	1	7
5	—	—	1	—	—	1	1	—	1	3	3	7
6	—	—	1	—	—	1	2	—	1	4	1	8
7	—	—	1	—	—	1	3	—	1	5	—	9
8	—	—	1	—	—	1	3	2	1	5	3	10
9	—	—	1	—	—	1	4	—	1	6	1	10
30	—	—	1	—	—	1	4	2	1	7	—	11
1	—	—	1	—	—	1	5	—	1	7	2	2
2	—	—	1	—	—	1	5	3	1	8	1	2
3	—	—	1	—	—	1	6	1	1	8	3	2
4	—	—	1	—	—	1	6	3	1	9	2	2
5	—	—	1	—	—	1	7	1	1	10	—	2
6	—	—	1	—	—	1	8	—	1	10	3	2
7	—	—	1	—	—	1	8	2	2	11	1	2
8	—	—	1	—	—	1	9	—	2	—	—	2
9	—	—	1	—	—	1	9	2	2	—	2	6
40	—	—	1	—	—	1	10	—	2	1	1	7
1	—	—	1	—	—	1	10	3	2	1	3	8
2	—	—	1	—	—	1	11	1	2	2	1	9
3	—	—	1	—	—	1	11	3	2	3	—	9
4	—	—	1	—	—	2	—	1	2	3	2	10
5	—	—	1	—	—	2	1	—	2	4	1	11
6	—	—	1	—	—	2	1	2	2	5	—	3
7	—	—	1	—	—	2	2	—	2	5	2	3
8	—	—	1	—	—	2	2	2	2	6	1	3
9	—	—	1	—	—	2	3	—	2	6	3	3
50	—	—	1	—	—	2	3	2	2	7	2	3
1	—	—	2	—	—	2	4	1	2	8	—	4
2	—	—	2	—	—	2	4	3	2	8	3	5
3	—	—	2	—	—	2	5	1	2	9	1	5
4	—	—	2	—	—	2	5	3	2	10	—	6
5	—	—	2	—	—	2	6	1	2	10	3	7

56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
1
2
3
4
5
6
7
8
9
100
200
300
400
500
600
700
800
900
1000
2000

TWENTY-FOUR DAYS.

409

L. at	3 per Cent.				3 1/2 p. Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
56	—	2	2	2	—	2	7	—	—	2	11	1	—	3	8	1
7	—	2	3	—	—	2	7	2	—	2	11	3	—	3	9	—
8	—	2	3	2	—	2	8	—	—	3	—	2	—	3	9	3
9	—	2	4	—	—	2	8	2	—	3	1	—	—	3	10	2
60	—	2	4	2	—	2	9	—	—	3	1	3	—	3	11	1
1	—	2	5	—	—	2	9	3	—	3	2	1	—	4	—	—
2	—	2	5	2	—	2	10	1	—	3	3	—	—	4	—	3
3	—	2	6	—	—	2	10	3	—	3	3	2	—	4	1	2
4	—	2	6	2	—	2	11	1	—	3	4	1	—	4	2	1
5	—	2	7	—	—	2	11	3	—	3	4	3	—	4	3	—
6	—	2	7	2	—	3	—	1	—	3	5	2	—	4	3	3
7	—	2	8	—	—	3	1	—	—	3	6	—	—	4	4	2
8	—	2	8	2	—	3	1	2	—	3	6	3	—	4	5	1
9	—	2	9	—	—	3	2	—	—	3	7	1	—	4	6	1
70	—	2	9	1	—	3	2	2	—	3	8	—	—	4	7	—
1	—	2	9	3	—	3	3	—	—	3	8	2	—	4	7	3
2	—	2	10	1	—	3	3	3	—	3	9	1	—	4	8	2
3	—	2	10	3	—	3	4	1	—	3	9	3	—	4	9	1
4	—	2	11	1	—	3	4	3	—	3	10	2	—	4	10	1
5	—	2	11	3	—	3	5	1	—	3	11	1	—	4	11	—
6	—	3	—	—	—	3	5	3	—	4	—	—	—	4	11	3
7	—	3	—	2	—	3	6	2	—	4	—	2	—	4	—	2
8	—	3	1	—	—	3	7	—	—	4	1	1	—	5	1	1
9	—	3	1	2	—	3	7	2	—	4	2	—	—	5	2	—
80	—	3	2	—	—	3	8	—	—	4	2	2	—	5	2	3
1	—	3	2	2	—	3	8	2	—	4	3	1	—	5	3	3
2	—	3	3	—	—	3	9	—	—	4	3	3	—	5	4	2
3	—	3	3	2	—	3	9	3	—	4	4	2	—	5	5	1
4	—	3	4	—	—	3	10	1	—	4	5	—	—	5	6	—
5	—	3	4	2	—	3	10	3	—	4	5	3	—	5	7	—
6	—	3	5	—	—	3	11	1	—	4	6	1	—	5	7	3
7	—	3	5	1	—	4	—	—	—	4	7	—	—	5	8	2
8	—	3	5	3	—	4	—	2	—	4	7	2	—	5	9	1
9	—	3	6	1	—	4	1	—	—	4	8	1	—	5	10	—
90	—	3	6	3	—	4	1	2	—	4	9	—	—	5	11	—
1	—	3	7	1	—	4	2	—	—	4	9	2	—	5	11	3
2	—	3	7	2	—	4	2	3	—	4	10	1	—	6	—	2
3	—	3	8	—	—	4	3	1	—	4	10	3	—	6	1	1
4	—	3	8	2	—	4	3	3	—	4	11	2	—	6	2	—
5	—	3	9	—	—	4	4	1	—	5	—	—	—	6	3	—
6	—	3	9	2	—	4	5	—	—	5	—	3	—	6	3	3
7	—	3	10	—	—	4	5	2	—	5	1	1	—	6	4	2
8	—	3	10	2	—	4	6	—	—	5	2	—	—	6	5	1
9	—	3	11	—	—	4	6	2	—	5	2	2	—	6	6	—
100	—	3	11	1	—	4	7	1	—	5	3	1	—	6	7	—
200	—	7	10	3	—	9	2	2	—	10	6	1	—	13	2	—
300	—	11	10	—	—	13	9	3	—	15	9	2	—	19	8	3
400	—	15	9	2	—	18	4	3	—	1	1	—	2	1	6	3
500	—	19	8	3	—	1	3	—	—	1	6	3	3	1	12	10
600	1	3	8	1	1	7	7	1	1	11	7	—	—	1	19	5
700	1	7	7	2	1	12	2	2	1	16	10	—	—	2	6	—
800	1	11	7	—	1	16	9	3	2	2	1	—	—	2	12	7
900	1	15	6	2	2	1	5	—	2	7	4	1	—	2	19	2
1000	1	19	5	2	2	6	—	1	2	12	7	1	—	3	5	9
2000	3	18	10	3	4	12	—	2	5	5	2	2	—	6	11	6

T

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.			L. at
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	
1	—	—	2	—	—	2	—	—	3	—	—	3	56
2	—	—	1	—	—	1	—	—	1 1	—	—	1 2	7
3	—	—	1 2	—	—	1 3	—	—	2 —	—	—	2 3	8
4	—	—	2 —	—	—	2 1	—	—	2 3	—	—	3 1	9
5	—	—	2 2	—	—	2 3	—	—	3 1	—	—	4 —	60
6	—	—	3 —	—	—	3 1	—	—	4 —	—	—	4 3	1
7	—	—	3 2	—	—	4 —	—	—	4 2	—	—	5 3	2
8	—	—	4 —	—	—	4 2	—	—	5 1	—	—	6 2	3
9	—	—	4 2	—	—	5 —	—	—	6 —	—	—	7 1	4
10	—	—	5 —	—	—	5 3	—	—	6 2	—	—	8 —	5
11	—	—	5 2	—	—	6 1	—	—	7 1	—	—	9 —	6
12	—	—	6 —	—	—	7 —	—	—	8 —	—	—	9 3	7
13	—	—	6 2	—	—	7 2	—	—	8 2	—	—	10 2	8
14	—	—	7 —	—	—	8 —	—	—	9 1	—	—	11 1	9
15	—	—	7 2	—	—	8 3	—	—	10 —	—	—	—	70
16	—	—	8 —	—	—	9 1	—	—	10 2	—	—	1 —	1
17	—	—	8 2	—	—	9 3	—	—	11 1	—	—	1 3	2
18	—	—	9 —	—	—	10 1	—	—	1 —	—	—	2 2	3
19	—	—	9 2	—	—	10 3	—	—	1 — 2	—	—	3 1	4
20	—	—	10 —	—	—	11 2	—	—	1 1 1	—	—	4 1	5
1	—	—	10 1	—	—	1 —	—	—	1 1 3	—	—	5 —	6
2	—	—	10 3	—	—	1 — 2	—	—	1 2 2	—	—	5 3	7
3	—	—	11 1	—	—	1 1	—	—	1 3 —	—	—	6 3	8
4	—	—	11 3	—	—	1 1 3	—	—	1 3 3	—	—	7 2	9
5	—	—	1 —	—	—	1 2 1	—	—	1 4 2	—	—	8 1	80
6	—	—	1 — 3	—	—	1 3 —	—	—	1 5 —	—	—	9 —	1
7	—	—	1 1 1	—	—	1 3 2	—	—	1 5 3	—	—	10 —	2
8	—	—	1 1 3	—	—	1 4 1	—	—	1 6 2	—	—	10 3	3
9	—	—	1 2 1	—	—	1 4 3	—	—	1 7 —	—	—	11 2	4
30	—	—	1 2 3	—	—	1 5 1	—	—	1 7 3	—	—	2 — 2	5
1	—	—	1 3 1	—	—	1 5 3	—	—	1 8 2	—	—	2 1 1	6
2	—	—	1 3 3	—	—	1 6 2	—	—	1 9 —	—	—	2 2 —	7
3	—	—	1 4 1	—	—	1 7 —	—	—	1 9 3	—	—	2 3 —	8
4	—	—	1 4 3	—	—	1 7 2	—	—	1 10 2	—	—	2 3 3	9
5	—	—	1 5 1	—	—	1 8 1	—	—	1 11 —	—	—	2 4 2	90
6	—	—	1 5 3	—	—	1 8 3	—	—	1 11 3	—	—	2 5 1	1
7	—	—	1 6 1	—	—	1 9 1	—	—	2 — 2	—	—	2 6 1	2
8	—	—	1 6 3	—	—	1 10 —	—	—	2 1 —	—	—	2 7 —	3
9	—	—	1 7 1	—	—	1 10 2	—	—	2 1 2	—	—	2 7 3	4
40	—	—	1 7 3	—	—	1 11 —	—	—	2 2 1	—	—	2 8 3	5
1	—	—	1 8 1	—	—	1 11 3	—	—	2 3 —	—	—	2 9 2	6
2	—	—	1 8 3	—	—	2 — 1	—	—	2 3 3	—	—	2 10 1	7
3	—	—	1 9 1	—	—	2 — 3	—	—	2 4 1	—	—	2 11 1	8
4	—	—	1 9 3	—	—	2 1 1	—	—	2 5 —	—	—	3 —	9
5	—	—	1 10 1	—	—	2 2 —	—	—	2 5 3	—	—	3 — 3	100
6	—	—	1 10 3	—	—	2 2 2	—	—	2 6 1	—	—	3 1 3	200
7	—	—	1 11 1	—	—	2 3 —	—	—	2 7 —	—	—	3 2 2	300
8	—	—	1 11 3	—	—	2 3 2	—	—	2 7 3	—	—	3 3 2	400
9	—	—	2 — 1	—	—	2 4 1	—	—	2 8 1	—	—	3 4 1	500
50	—	—	2 — 3	—	—	2 4 3	—	—	2 9 —	—	—	3 5 1	600
1	—	—	2 1 —	—	—	2 5 1	—	—	2 9 3	—	—	3 6 —	700
2	—	—	2 1 2	—	—	2 6 —	—	—	2 10 1	—	—	3 6 3	800
3	—	—	2 2 —	—	—	2 6 2	—	—	2 11 —	—	—	3 7 2	900
4	—	—	2 2 2	—	—	2 7 —	—	—	2 11 2	—	—	3 8 2	1000
5	—	—	2 3 —	—	—	2 7 3	—	—	3 —	—	—	3 9 1	2000

TWENTY-FIVE DAYS.

411

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	3 2	—	2	8 1	—	3	1 —	—	3	10 —
7	—	2	4 —	—	2	8 3	—	3	1 3	—	3	11 —
8	—	2	4 2	—	2	9 1	—	3	2 1	—	3	11 3
9	—	2	5 —	—	2	10 —	—	3	3 —	—	4	1 2
66	—	2	5 2	—	2	10 2	—	3	3 2	—	4	1 1
1	—	2	6 —	—	2	11 1	—	3	4 1	—	4	2 1
2	—	2	6 2	—	2	11 3	—	3	5 —	—	4	2 —
3	—	2	7 —	—	3	— 1	—	3	5 2	—	4	3 3
4	—	2	7 2	—	3	1 —	—	3	6 1	—	4	4 2
5	—	2	8 —	—	3	1 2	—	3	6 3	—	4	5 2
6	—	2	8 2	—	3	2 —	—	3	7 2	—	4	6 1
7	—	2	9 —	—	3	2 2	—	3	8 1	—	4	7 —
8	—	2	9 2	—	3	3 1	—	3	8 3	—	4	7 3
9	—	2	10 —	—	3	3 3	—	3	9 1	—	4	8 3
70	—	2	10 2	—	3	4 1	—	3	10 —	—	4	9 2
1	—	2	11 —	—	3	4 3	—	3	10 2	—	4	10 1
2	—	2	11 2	—	3	5 2	—	3	11 1	—	4	11 —
3	—	3	—	—	3	6 —	—	4	—	—	5	—
4	—	3	— 2	—	3	6 2	—	4	— 2	—	5	— 3
5	—	3	1 —	—	3	7 1	—	4	1 1	—	5	1 2
6	—	3	1 2	—	3	7 3	—	4	2 —	—	5	2 2
7	—	3	2 —	—	3	8 1	—	4	2 2	—	5	3 1
8	—	3	2 2	—	3	9 —	—	4	3 1	—	5	4 —
9	—	3	3 —	—	3	9 2	—	4	4 —	—	5	4 3
80	—	3	3 2	—	3	10 —	—	4	4 2	—	5	5 3
1	—	3	4 —	—	3	10 3	—	4	5 1	—	5	6 2
2	—	3	4 1	—	3	11 1	—	4	6 —	—	5	7 1
3	—	3	4 3	—	3	11 3	—	4	6 2	—	5	8 1
4	—	3	5 1	—	4	— 1	—	4	7 1	—	5	9 —
5	—	3	5 3	—	4	1 —	—	4	8 —	—	5	9 3
6	—	3	6 1	—	4	1 2	—	4	8 2	—	5	10 2
7	—	3	6 3	—	4	2 —	—	4	9 1	—	5	11 1
8	—	3	7 1	—	4	2 2	—	4	10 —	—	6	— 1
9	—	3	7 3	—	4	3 1	—	4	10 2	—	6	1 —
90	—	3	8 1	—	4	3 3	—	4	11 —	—	6	1 3
1	—	3	8 3	—	4	4 1	—	4	11 3	—	6	2 3
2	—	3	9 1	—	4	4 3	—	5	— 2	—	6	3 2
3	—	3	9 3	—	4	5 2	—	5	1 —	—	6	4 2
4	—	3	10 1	—	4	6 —	—	5	1 3	—	6	5 1
5	—	3	10 3	—	4	6 2	—	5	2 2	—	6	6 —
6	—	3	11 1	—	4	7 —	—	5	3 —	—	6	6 3
7	—	3	11 3	—	4	7 3	—	5	3 3	—	6	7 2
8	—	4	— 1	—	4	8 1	—	5	4 2	—	6	8 2
9	—	4	— 3	—	4	8 3	—	5	5 —	—	6	9 1
100	—	4	1 1	—	4	9 2	—	5	5 3	—	6	10 1
200	—	8	2 2	—	9	7 —	—	10	11 2	—	13	8 1
300	—	12	4 —	—	14	4 3	—	16	5 1	—	1	6 2
400	—	16	5 1	—	19	2 1	—	1	1 1	—	1	7 4 3
500	1	—	6 2	1	3	11 3	1	7	4 3	1	14	3 —
600	1	4	7 3	1	8	9 1	1	12	10 2	2	1	1 —
700	1	8	9 1	1	13	7 —	1	18	4 1	2	7	11 1
800	1	12	10 2	1	18	4 2	2	3	10 —	2	14	9 2
900	1	16	11 3	2	3	2 —	2	9	3 3	3	1	7 3
1000	2	1	1 —	2	7	11 2	2	14	9 3	3	8	6 —
1000	4	2	2 1	4	15	10 3	5	9	7 1	6	17	—

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	2	—	—	2	—	—	2	—	—	3
2	—	—	1	—	—	1	1	—	1	1	—	1
3	—	—	1	—	—	1	3	—	2	—	—	2
4	—	—	2	—	—	2	2	—	2	3	—	2
5	—	—	2	—	—	3	—	—	3	1	—	4
6	—	—	3	—	—	3	3	—	4	—	—	5
7	—	—	3	—	—	4	1	—	4	3	—	6
8	—	—	4	—	—	4	3	—	5	2	—	6
9	—	—	4	—	—	5	2	—	6	1	—	7
10	—	—	5	—	—	6	—	—	6	3	—	8
11	—	—	5	—	—	6	2	—	7	2	—	9
12	—	—	6	—	—	7	1	—	8	1	—	10
13	—	—	6	—	—	7	3	—	9	—	—	11
14	—	—	7	—	—	8	1	—	9	2	—	1
15	—	—	7	—	—	8	3	—	10	1	—	3
16	—	—	8	—	—	9	2	—	11	—	—	1
17	—	—	8	—	—	10	—	—	11	3	—	2
18	—	—	9	—	—	10	3	—	1	—	—	3
19	—	—	9	—	—	11	1	—	1	1	—	4
20	—	—	10	—	—	1	—	—	1	3	—	5
1	—	—	10	—	—	1	2	—	1	2	—	6
2	—	—	11	—	—	1	1	—	1	3	—	7
3	—	—	11	—	—	1	3	—	1	3	—	8
4	—	—	1	—	—	1	2	—	1	4	—	9
5	—	—	1	—	—	1	3	—	1	5	—	10
6	—	—	1	—	—	1	3	—	1	5	—	11
7	—	—	1	—	—	1	4	—	1	6	—	12
8	—	—	1	—	—	1	4	—	1	7	—	13
9	—	—	1	—	—	1	5	—	1	8	—	14
30	—	—	1	—	—	1	6	—	1	8	—	15
1	—	—	1	—	—	1	6	—	1	9	—	16
2	—	—	1	—	—	1	7	—	1	10	—	17
3	—	—	1	—	—	1	8	—	1	10	—	18
4	—	—	1	—	—	1	8	—	1	11	—	19
5	—	—	1	—	—	1	9	—	1	11	—	20
6	—	—	1	—	—	1	9	—	2	—	—	21
7	—	—	1	—	—	1	10	—	2	1	—	22
8	—	—	1	—	—	1	11	—	2	2	—	23
9	—	—	1	—	—	1	11	—	2	2	—	24
40	—	—	1	—	—	2	—	—	2	3	—	25
1	—	—	1	—	—	2	—	—	2	4	—	26
2	—	—	1	—	—	2	1	—	2	4	—	27
3	—	—	1	—	—	2	1	—	2	5	—	28
4	—	—	1	—	—	2	2	—	2	6	—	29
5	—	—	1	—	—	2	3	—	2	6	—	30
6	—	—	1	—	—	2	3	—	2	7	—	31
7	—	—	2	—	—	2	4	—	2	8	—	32
8	—	—	2	—	—	2	5	—	2	8	—	33
9	—	—	2	—	—	2	5	—	2	9	—	34
50	—	—	2	—	—	2	6	—	2	10	—	35
1	—	—	2	—	—	2	6	—	2	11	—	36
2	—	—	2	—	—	2	7	—	2	11	—	37
3	—	—	2	—	—	2	8	—	3	—	—	38
4	—	—	2	—	—	2	8	—	3	1	—	39
5	—	—	2	—	—	2	9	—	3	1	—	40

TWENTY-SIX DAYS.

413

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	4 3	—	2	9 3	—	3	2 1	—	3	11 3
7	—	2	5 1	—	2	10 1	—	3	3 —	—	4	— 3
8	—	2	5 3	—	2	11 —	—	3	3 3	—	4	1 2
9	—	2	6 1	—	2	11 2	—	3	4 2	—	4	2 2
60	—	2	6 3	—	3	— —	—	3	5 —	—	4	3 1
1	—	2	7 1	—	3	— 3	—	3	5 3	—	4	4 —
2	—	2	7 3	—	3	1 1	—	3	6 2	—	4	5 —
3	—	2	8 1	—	3	2 —	—	3	7 1	—	4	5 3
4	—	2	8 3	—	3	2 2	—	3	8 —	—	4	6 3
5	—	2	9 1	—	3	3 —	—	3	8 2	—	4	7 2
6	—	2	9 3	—	3	3 3	—	3	9 1	—	4	8 2
7	—	2	10 1	—	3	4 1	—	3	10 —	—	4	9 1
8	—	2	10 3	—	3	5 —	—	3	10 3	—	4	10 1
9	—	2	11 1	—	3	5 2	—	3	11 1	—	4	11 —
70	—	3	—	—	3	6 —	—	4	— —	—	4	11 3
1	—	3	— 2	—	3	6 2	—	4	— 2	—	5	— 3
2	—	3	1 —	—	3	7 1	—	4	1 1	—	5	1 2
3	—	3	1 2	—	3	7 3	—	4	2 —	—	5	2 2
4	—	3	2 —	—	3	8 1	—	4	2 3	—	5	3 1
5	—	3	2 2	—	3	9 —	—	4	3 1	—	5	4 1
6	—	3	3 —	—	3	9 2	—	4	4 —	—	5	5 —
7	—	3	3 2	—	3	10 —	—	4	4 3	—	5	6 —
8	—	3	4 —	—	3	10 3	—	4	5 2	—	5	6 3
9	—	3	4 2	—	4	11 1	—	4	6 —	—	5	7 2
80	—	3	5 —	—	4	— —	—	4	6 3	—	5	8 2
1	—	3	5 2	—	4	— 2	—	4	7 2	—	5	9 1
2	—	3	6 —	—	4	1 —	—	4	8 1	—	5	10 1
3	—	3	6 2	—	4	1 3	—	4	8 3	—	5	11 —
4	—	3	7 —	—	4	2 1	—	4	9 2	—	5	11 3
5	—	3	7 2	—	4	3 —	—	4	10 1	—	6	— 3
6	—	3	8 —	—	4	3 2	—	4	11 —	—	6	1 2
7	—	3	8 2	—	4	4 1	—	4	11 2	—	6	2 1
8	—	3	9 —	—	4	4 3	—	5	— 1	—	6	3 —
9	—	3	9 2	—	4	5 1	—	5	1 —	—	6	4 —
90	—	3	10 1	—	4	6 —	—	5	1 2	—	6	5 —
1	—	3	10 3	—	4	6 2	—	5	2 1	—	6	5 3
2	—	3	11 1	—	4	7 —	—	5	3 —	—	6	6 3
3	—	3	11 3	—	4	7 3	—	5	3 3	—	6	7 2
4	—	4	— 1	—	4	8 1	—	5	4 1	—	6	8 2
5	—	4	— 3	—	4	9 —	—	5	5 —	—	6	9 1
6	—	4	1 1	—	4	9 2	—	5	5 3	—	6	10 1
7	—	4	1 3	—	4	10 1	—	5	6 2	—	6	11 —
8	—	4	2 1	—	4	10 3	—	5	7 —	—	7	— —
9	—	4	2 3	—	4	11 1	—	5	7 3	—	7	— 3
100	—	4	3 1	—	5	— —	—	5	8 2	—	7	1 2
200	—	8	6 2	—	9	11 3	—	11	4 3	—	14	3 —
300	—	12	10 —	—	14	11 2	—	17	1 1	—	1	4 2
400	—	17	1 1	—	19	11 2	—	1	2 9 2	—	1	8 6 —
500	1	1	4 2	1	4	11 1	1	8	6 —	1	15	7 2
600	1	5	7 3	1	9	11 1	1	14	2 1	2	2	9 —
700	1	9	11 —	1	14	11 —	1	19	10 3	2	9	10 1
800	1	14	2 2	1	19	10 3	2	5	7 —	2	16	11 3
900	1	18	5 3	2	4	10 2	2	11	3 2	3	4	1 1
1000	2	2	9 —	2	9	10 1	2	16	11 3	3	11	2 3
2000	4	5	5 3	4	19	8 3	5	13	11 3	7	2	5 2

T 3

TWENTY-SEVEN DAYS.

415

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	6 —	—	2	10 2	—	3	3 3	—	4	1 3
7	—	2	6 2	—	2	11 1	—	3	4 2	—	4	2 2
8	—	2	7 —	—	2	11 3	—	3	5 1	—	4	3 1
9	—	2	7 2	—	3	— 2	—	3	6 —	—	4	4 1
60	—	2	8 —	—	3	1 1	—	3	6 3	—	4	5 —
1	—	2	8 2	—	3	1 3	—	3	7 2	—	4	6 —
2	—	2	9 —	—	3	2 2	—	3	8 —	—	4	6 3
3	—	2	9 3	—	3	3 —	—	3	8 3	—	4	7 3
4	—	2	10 1	—	3	3 3	—	3	9 2	—	4	8 3
5	—	2	10 3	—	3	4 1	—	3	10 1	—	4	9 2
6	—	2	11 1	—	3	5 —	—	3	11 —	—	4	10 2
7	—	2	11 3	—	3	5 2	—	3	11 3	—	4	11 1
8	—	3	— 1	—	3	6 1	—	4	— 2	—	5	— 1
9	—	3	— 3	—	3	6 3	—	4	1 —	—	5	1 1
70	—	3	1 1	—	3	7 2	—	4	1 3	—	5	2 —
1	—	3	1 3	—	3	8 —	—	4	2 2	—	5	2 3
2	—	3	2 1	—	3	8 3	—	4	3 1	—	5	3 3
3	—	3	3 —	—	3	9 1	—	4	4 —	—	5	4 2
4	—	3	3 2	—	3	10 —	—	4	4 3	—	5	5 2
5	—	3	4 —	—	3	10 2	—	4	5 2	—	5	6 2
6	—	3	4 2	—	3	11 1	—	4	6 —	—	5	7 1
7	—	3	5 —	—	3	11 3	—	4	6 3	—	5	8 1
8	—	3	5 2	—	4	— 2	—	4	7 2	—	5	9 —
9	—	3	6 —	—	4	1 —	—	4	8 1	—	5	10 —
80	—	3	6 2	—	4	1 3	—	4	9 —	—	5	11 —
1	—	3	7 —	—	4	2 1	—	4	9 3	—	5	11 3
2	—	3	7 3	—	4	3 —	—	4	10 2	—	6	— 3
3	—	3	8 1	—	4	3 2	—	4	11 —	—	6	1 2
4	—	3	8 3	—	4	4 1	—	4	11 3	—	6	2 2
5	—	3	9 1	—	4	4 3	—	5	— 2	—	6	3 1
6	—	3	9 3	—	4	5 2	—	5	1 1	—	6	4 1
7	—	3	10 1	—	4	6 —	—	5	2 —	—	6	5 1
8	—	3	10 3	—	4	6 3	—	5	2 3	—	6	6 —
9	—	3	11 1	—	4	7 1	—	5	3 2	—	6	7 —
90	—	4	— —	—	4	8 —	—	5	4 —	—	6	8 —
1	—	4	— 2	—	4	8 2	—	5	4 3	—	6	8 3
2	—	4	1 —	—	4	9 1	—	5	5 2	—	6	9 3
3	—	4	1 2	—	4	9 3	—	5	6 1	—	6	10 2
4	—	4	2 —	—	4	10 2	—	5	7 —	—	6	11 2
5	—	4	2 2	—	4	11 —	—	5	7 3	—	7	— 1
6	—	4	3 —	—	4	11 3	—	5	8 2	—	7	1 1
7	—	4	3 3	—	5	— 1	—	5	9 —	—	7	2 1
8	—	4	4 1	—	5	1 —	—	5	9 2	—	7	3 —
9	—	4	4 3	—	5	1 2	—	5	10 1	—	7	4 —
100	—	4	5 1	—	5	2 1	—	5	11 —	—	7	4 3
200	—	8	10 2	—	10	4 1	—	11	10 —	—	14	9 2
300	—	13	3 3	—	15	6 2	—	17	9 —	—	1	2 1
400	—	17	9 —	—	1	8 2	—	1	3 8 —	—	1	9 7 —
500	1	2	2 1	1	5	10 3	1	9	7 —	1	17	— —
600	1	6	7 3	1	11	— 3	1	15	6 —	2	4	4 3
700	1	11	1 —	1	16	3 —	2	1	5 —	2	11	9 2
800	1	15	6 1	2	1	5 1	2	7	4 —	2	19	2 1
900	1	19	11 2	2	6	7 1	2	13	3 —	3	6	7 —
1000	2	4	4 3	2	11	9 2	2	19	2 —	3	13	11 3
2000	4	8	9 1	5	3	6 3	5	18	4 1	7	7	11 2

416 TWENTY EIGHT DAYS.

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	—	2	—	—	—	—	—	3	—	—
2	—	—	1	—	—	1	1	—	—	1	2	—
3	—	—	1	—	—	1	3	—	—	2	1	—
4	—	—	2	—	—	2	2	—	—	3	—	—
5	—	—	2	—	—	3	1	—	—	3	3	—
6	—	—	3	—	—	3	3	—	—	4	2	—
7	—	—	3	—	—	4	2	—	—	5	1	—
8	—	—	4	—	—	5	—	—	—	6	—	—
9	—	—	5	—	—	5	3	—	—	6	3	—
10	—	—	5	—	—	6	2	—	—	7	2	—
11	—	—	6	—	—	7	—	—	—	8	1	—
12	—	—	6	—	—	7	3	—	—	9	—	—
13	—	—	7	—	—	8	1	—	—	9	3	—
14	—	—	7	—	—	9	—	—	—	10	2	—
15	—	—	8	—	—	9	3	—	—	11	1	—
16	—	—	9	—	—	10	1	—	—	1	—	—
17	—	—	9	—	—	11	—	—	—	1	—	—
18	—	—	10	—	—	11	2	—	—	1	1	1
19	—	—	10	—	—	1	—	1	—	1	2	—
20	—	—	11	—	—	1	1	—	—	1	2	3
1	—	—	11	—	—	1	1	2	—	1	3	2
2	—	—	1	—	—	1	2	1	—	1	4	1
3	—	—	1	—	—	1	2	3	—	1	5	—
4	—	—	1	—	—	1	3	2	—	1	5	3
5	—	—	1	—	—	1	4	—	—	1	6	2
6	—	—	1	—	—	1	4	3	—	1	7	1
7	—	—	1	—	—	1	5	1	—	1	8	—
8	—	—	1	—	—	1	6	—	—	1	8	3
9	—	—	1	—	—	1	6	2	—	1	9	2
30	—	—	1	—	—	1	7	1	—	1	10	—
1	—	—	1	—	—	1	8	—	—	1	10	3
2	—	—	1	—	—	1	8	2	—	1	11	2
3	—	—	1	—	—	1	9	1	—	2	—	1
4	—	—	1	—	—	1	9	3	—	2	1	—
5	—	—	1	—	—	1	10	2	—	2	1	3
6	—	—	1	—	—	1	11	1	—	2	2	2
7	—	—	1	—	—	1	11	3	—	2	3	1
8	—	—	1	—	—	2	—	2	—	2	4	—
9	—	—	1	—	—	2	1	—	—	2	4	3
40	—	—	1	—	—	2	1	3	—	2	5	2
1	—	—	1	—	—	2	2	1	—	2	6	1
2	—	—	1	—	—	2	3	—	—	2	7	—
3	—	—	1	—	—	2	3	3	—	2	7	3
4	—	—	2	—	—	2	4	1	—	2	8	2
5	—	—	2	—	—	2	5	—	—	2	9	1
6	—	—	2	—	—	2	5	2	—	2	10	—
7	—	—	2	—	—	2	6	1	—	2	11	2
8	—	—	2	—	—	2	6	3	—	2	11	1
9	—	—	2	—	—	2	7	2	—	3	—	—
50	—	—	2	—	—	2	8	1	—	3	—	—
1	—	—	2	—	—	2	8	3	—	3	1	2
2	—	—	2	—	—	2	9	2	—	3	2	1
3	—	—	2	—	—	2	10	—	—	3	3	—
4	—	—	2	—	—	2	10	3	—	3	3	3
5	—	—	2	—	—	2	11	1	—	3	4	2

L. at
56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
1
2
3
4
5
6
7
8
9
100
200
300
400
500
600
700
800
900
1000
2000

TWENTY-EIGHT DAYS.

417

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	7	—	3	—	—	3	5	—	4	3
7	—	2	7	—	3	—	—	3	6	—	4	4
8	—	2	8	—	3	1	—	3	6	—	4	5
9	—	2	8	—	3	2	—	3	7	—	4	6
60	—	2	9	—	3	2	—	3	8	—	4	7
1	—	2	9	—	3	3	—	3	9	—	4	8
2	—	2	10	—	3	4	—	3	9	—	4	9
3	—	2	10	—	3	4	—	3	10	—	4	10
4	—	2	11	—	3	5	—	3	11	—	4	11
5	—	3	—	—	3	5	—	4	—	—	5	—
6	—	3	—	—	3	6	—	4	—	—	5	1
7	—	3	1	—	3	7	—	4	1	—	5	2
8	—	3	1	—	3	7	—	4	2	—	5	2
9	—	3	2	—	3	8	—	4	2	—	5	3
70	—	3	2	—	3	9	—	4	3	—	5	4
1	—	3	3	—	3	9	—	4	4	—	5	5
2	—	3	3	—	3	10	—	4	5	—	5	6
3	—	3	4	—	3	11	—	4	5	—	5	7
4	—	3	4	—	3	11	—	4	6	—	5	8
5	—	3	5	—	4	—	—	4	7	—	5	9
6	—	3	5	—	4	1	—	4	8	—	5	10
7	—	3	6	—	4	1	—	4	8	—	5	11
8	—	3	7	—	4	2	—	4	9	—	6	—
9	—	3	7	—	4	3	—	4	10	—	6	1
80	—	3	8	—	4	3	—	4	11	—	6	1
1	—	3	8	—	4	4	—	4	11	—	6	2
2	—	3	9	—	4	4	—	5	—	—	6	3
3	—	3	9	—	4	5	—	5	1	—	6	4
4	—	3	10	—	4	6	—	5	2	—	6	5
5	—	3	10	—	4	6	—	5	2	—	6	6
6	—	3	11	—	4	7	—	5	3	—	6	7
7	—	4	—	—	4	8	—	5	4	—	6	8
8	—	4	—	—	4	8	—	5	4	—	6	9
9	—	4	1	—	4	9	—	5	5	—	6	10
90	—	4	1	—	4	10	—	5	6	—	6	11
1	—	4	2	—	4	10	—	5	7	—	7	—
2	—	4	2	—	4	11	—	5	7	—	7	—
3	—	4	3	—	5	—	—	5	8	—	7	—
4	—	4	3	—	5	—	—	5	9	—	7	—
5	—	4	4	—	5	1	—	5	10	—	7	—
6	—	4	5	—	5	1	—	5	10	—	7	—
7	—	4	5	—	5	2	—	5	11	—	7	—
8	—	4	6	—	5	3	—	6	—	—	7	—
9	—	4	6	—	5	3	—	6	1	—	7	—
100	—	4	7	—	5	4	—	6	1	—	7	—
200	—	9	2	—	10	9	—	12	3	—	15	—
300	—	13	9	—	16	1	—	18	5	—	1	—
400	—	18	4	—	1	1	—	1	4	—	1	—
500	1	3	—	—	1	6	—	1	10	—	1	—
600	1	7	7	—	1	12	—	1	16	—	2	—
700	1	12	2	—	1	17	—	2	2	—	2	—
800	1	16	9	—	2	2	—	2	9	—	3	—
900	2	1	5	—	2	8	—	2	15	—	3	—
1000	2	6	—	—	2	13	—	3	1	—	3	—
2000	4	12	—	—	5	7	—	6	2	—	7	—

TWENTY-NINE DAYS.

419

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	8 1	—	3	1 2	—	3	6 3	—	4	5 1
7	—	2	8 3	—	3	2 —	—	3	7 2	—	4	6 1
8	—	2	9 1	—	3	2 3	—	3	8 1	—	4	7 1
9	—	2	10 —	—	3	3 2	—	3	9 —	—	4	8 1
60	—	2	10 2	—	3	4 —	—	3	9 3	—	4	9 1
1	—	2	11 —	—	3	4 3	—	3	10 2	—	4	10 —
2	—	2	11 2	—	3	5 2	—	3	11 1	—	4	11 —
3	—	3	— 1	—	3	6 1	—	4	— —	—	5	— —
4	—	3	— 3	—	3	6 3	—	4	1 —	—	5	1 —
5	—	3	1 1	—	3	7 2	—	4	1 3	—	5	2 —
6	—	3	2 —	—	3	8 1	—	4	2 2	—	5	3 —
7	—	3	2 2	—	3	9 —	—	4	3 1	—	5	3 3
8	—	3	3 —	—	3	9 2	—	4	4 —	—	5	4 3
9	—	3	3 2	—	3	10 1	—	4	4 3	—	5	5 3
70	—	3	4 1	—	3	11 —	—	4	5 2	—	5	6 3
1	—	3	4 3	—	3	11 2	—	4	6 1	—	5	7 3
2	—	3	5 1	—	4	— 1	—	4	7 —	—	5	8 3
3	—	3	5 3	—	4	1 —	—	4	7 3	—	5	9 2
4	—	3	6 2	—	4	1 2	—	4	8 2	—	5	10 2
5	—	3	7 —	—	4	2 1	—	4	9 1	—	5	11 2
6	—	3	7 2	—	4	3 —	—	4	10 —	—	6	— 2
7	—	3	8 —	—	4	3 2	—	4	10 3	—	6	1 1
8	—	3	8 3	—	4	4 —	—	4	11 2	—	6	2 1
9	—	3	9 1	—	4	4 3	—	5	— 1	—	6	3 1
80	—	3	9 3	—	4	5 1	—	5	1 —	—	6	4 1
1	—	3	10 1	—	4	6 —	—	5	1 3	—	6	5 1
2	—	3	11 —	—	4	6 2	—	5	2 2	—	6	6 —
3	—	3	11 2	—	4	7 1	—	5	3 1	—	6	7 —
4	—	4	— —	—	4	8 —	—	5	4 —	—	6	8 —
5	—	4	— 2	—	4	8 2	—	5	4 3	—	6	9 —
6	—	4	1 1	—	4	9 1	—	5	5 2	—	6	10 —
7	—	4	1 3	—	4	10 —	—	5	6 1	—	6	11 —
8	—	4	2 1	—	4	10 2	—	5	7 —	—	7	— —
9	—	4	3 —	—	4	11 1	—	5	7 3	—	7	— 3
90	—	4	3 2	—	5	— —	—	5	8 3	—	7	1 3
1	—	4	4 —	—	5	— 2	—	5	9 2	—	7	2 3
2	—	4	4 3	—	5	1 1	—	5	10 1	—	7	3 3
3	—	4	5 1	—	5	2 —	—	5	11 —	—	7	4 3
4	—	4	5 3	—	5	2 2	—	5	11 3	—	7	5 2
5	—	4	6 1	—	5	3 1	—	6	— 2	—	7	6 2
6	—	4	7 —	—	5	4 —	—	6	1 1	—	7	7 2
7	—	4	7 2	—	5	4 2	—	6	2 —	—	7	8 2
8	—	4	8 —	—	5	5 1	—	6	2 3	—	7	9 2
9	—	4	8 2	—	5	6 —	—	6	3 1	—	7	10 2
100	—	4	9 1	—	5	6 3	—	6	4 1	—	7	11 1
200	—	9	6 2	—	11	1 2	—	12	8 2	—	15	10 2
300	—	14	3 3	—	16	8 1	—	19	— 3	—	1	3 10 —
400	—	19	1 —	—	1	2 3 —	—	1	5 5 —	—	1	11 9 2
500	1	3	10 1	1	7	9 3	1	11	9 2	1	19	8 3
600	1	8	7 1	1	13	4 2	1	18	2 —	2	7	8 —
700	1	13	4 2	1	18	11 —	2	4	6 1	2	15	7 2
800	1	18	1 3	2	4	5 3	2	10	10 3	3	3	6 3
900	2	2	11 —	2	10	— 2	2	17	3 1	3	11	6 —
1000	2	7	8 —	2	15	7 1	3	3	6 3	3	19	5 1
2000	4	15	4 1	5	11	2 3	6	7	1 2	7	18	10 3

THIRTY DAYS.

L. at	3 per Cent.				3 $\frac{1}{2}$ p. Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
1	—	—	—	2	—	—	—	2	—	—	—	3	—	—	1	—
2	—	—	1	1	—	—	1	1	—	—	1	2	—	—	2	—
3	—	—	1	3	—	—	2	—	—	—	2	1	—	—	3	—
4	—	—	2	1	—	—	2	3	—	—	3	—	—	—	4	—
5	—	—	3	—	—	—	3	2	—	—	3	3	—	—	5	—
6	—	—	3	2	—	—	4	—	—	—	4	3	—	—	6	—
7	—	—	4	1	—	—	4	3	—	—	5	2	—	—	6	3
8	—	—	4	3	—	—	5	2	—	—	6	1	—	—	7	3
9	—	—	5	1	—	—	6	—	—	—	7	—	—	—	8	3
10	—	—	6	—	—	—	6	3	—	—	7	3	—	—	9	3
11	—	—	6	2	—	—	7	2	—	—	8	2	—	—	10	3
12	—	—	7	—	—	—	8	1	—	—	9	2	—	—	11	3
13	—	—	7	2	—	—	9	—	—	—	10	1	—	1	—	3
14	—	—	8	1	—	—	9	3	—	—	11	—	—	1	1	3
15	—	—	8	3	—	—	10	1	—	—	11	3	—	1	2	3
16	—	—	9	1	—	—	11	—	—	1	—	2	—	1	3	3
17	—	—	9	3	—	—	11	3	—	1	1	1	—	1	4	3
18	—	—	10	2	—	1	—	2	—	1	2	1	—	1	5	3
19	—	—	11	—	—	1	1	1	—	1	3	—	—	1	6	3
20	—	—	11	3	—	1	1	3	—	1	3	3	—	1	7	3
1	—	1	—	1	—	1	2	2	—	1	4	2	—	1	8	3
2	—	1	—	3	—	1	3	1	—	1	5	1	—	1	9	3
3	—	1	1	2	—	1	4	—	—	1	6	—	—	1	10	3
4	—	1	2	—	—	1	4	3	—	1	7	—	—	1	11	3
5	—	1	2	2	—	1	5	1	—	1	7	3	—	2	—	2
6	—	1	3	1	—	1	6	—	—	1	8	2	—	2	1	2
7	—	1	3	3	—	1	6	3	—	1	9	1	—	2	2	2
8	—	1	4	2	—	1	7	2	—	1	10	—	—	2	3	2
9	—	1	5	—	—	1	8	1	—	1	10	3	—	2	4	2
30	—	1	5	2	—	1	8	3	—	1	11	3	—	2	5	2
1	—	1	6	1	—	1	9	2	—	2	—	2	—	2	6	2
2	—	1	6	3	—	1	10	1	—	2	1	1	—	2	7	2
3	—	1	7	1	—	1	11	—	—	2	2	—	—	2	8	2
4	—	1	8	—	—	1	11	3	—	2	2	3	—	2	9	2
5	—	1	8	2	—	2	—	1	—	2	3	2	—	2	10	2
6	—	1	9	—	—	2	1	—	—	2	4	2	—	2	11	2
7	—	1	9	3	—	2	1	3	—	2	5	1	—	3	—	2
8	—	1	10	1	—	2	2	2	—	2	6	—	—	3	1	2
9	—	1	10	3	—	2	3	—	—	2	6	3	—	3	2	2
40	—	1	11	2	—	2	3	3	—	2	7	2	—	3	3	2
1	—	2	—	—	—	2	4	1	—	2	8	1	—	3	4	2
2	—	2	—	2	—	2	5	—	—	2	9	1	—	3	5	2
3	—	2	1	1	—	2	5	3	—	2	10	—	—	3	6	1
4	—	2	1	3	—	2	6	2	—	2	10	3	—	3	7	1
5	—	2	2	2	—	2	7	1	—	2	11	2	—	3	8	1
6	—	2	3	—	—	2	7	3	—	3	—	1	—	3	9	1
7	—	2	3	2	—	2	8	2	—	3	1	—	—	3	10	1
8	—	2	4	1	—	2	9	1	—	3	2	—	—	3	11	1
9	—	2	4	3	—	2	10	—	—	3	2	3	—	4	—	1
50	—	2	5	2	—	2	10	2	—	3	3	2	—	4	1	1
1	—	2	6	—	—	2	11	1	—	3	4	1	—	4	2	1
2	—	2	6	3	—	3	—	—	—	3	5	—	—	4	3	1
3	—	2	7	1	—	3	—	3	—	3	5	3	—	4	4	1
4	—	2	7	3	—	3	1	2	—	3	6	2	—	4	5	1
5	—	2	8	2	—	3	2	—	—	3	7	1	—	4	6	1

THIRTY DAYS.

421

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	2	9 1	—	3	2 3	—	3	8 1	—	4	7 1
7	—	2	9 3	—	3	3 1	—	3	9 —	—	4	8 1
8	—	2	10 1	—	3	4 —	—	3	9 3	—	4	9 1
9	—	2	11 —	—	5	4 3	—	3	10 2	—	4	10 1
60	—	2	11 2	—	3	4 2	—	3	11 1	—	4	11 1
1	—	3	—	—	3	6 —	—	4	—	—	5	—
2	—	3	—	—	3	6 3	—	4	1 —	—	5	1 —
3	—	3	1 1	—	3	7 2	—	4	1 3	—	5	2 —
4	—	3	2 —	—	3	8 1	—	4	2 2	—	5	3 —
5	—	3	2 2	—	3	9 —	—	4	3 1	—	5	4 —
6	—	3	3 —	—	3	9 2	—	4	4 —	—	5	5 —
7	—	3	3 3	—	3	10 1	—	4	4 3	—	5	6 —
8	—	3	4 1	—	3	11 2	—	4	5 2	—	5	7 —
9	—	3	5 —	—	3	11 2	—	4	6 2	—	5	8 —
70	—	3	5 2	—	4	—	—	4	7 1	—	5	9 —
1	—	3	6 —	—	4	1 —	—	4	8 —	—	5	10 —
2	—	3	6 3	—	4	1 3	—	4	8 3	—	5	11 —
3	—	3	7 1	—	4	2 2	—	4	9 2	—	6	—
4	—	3	7 3	—	4	3 —	—	4	10 1	—	6	1 —
5	—	3	8 2	—	4	3 2	—	4	11 —	—	6	2 —
6	—	3	9 —	—	4	4 3	—	5	—	—	6	3 —
7	—	3	9 3	—	4	5 1	—	5	—	—	6	4 —
8	—	3	10 1	—	4	5 3	—	5	1 2	—	6	5 —
9	—	3	10 3	—	4	6 2	—	5	2 1	—	6	6 —
80	—	3	11 1	—	4	7 1	—	5	3 —	—	6	7 —
1	—	4	—	—	4	7 3	—	5	3 3	—	6	8 —
2	—	4	—	—	4	8 2	—	5	4 3	—	6	8 3
3	—	4	1 1	—	4	9 1	—	5	5 2	—	6	9 3
4	—	4	1 3	—	4	10 —	—	5	6 1	—	6	10 3
5	—	4	2 1	—	4	10 2	—	5	7 —	—	6	11 3
6	—	4	3 —	—	4	11 1	—	5	7 3	—	7	—
7	—	4	3 2	—	5	—	—	5	8 2	—	7	1 3
8	—	4	4 —	—	5	—	—	5	9 2	—	7	2 3
9	—	4	4 3	—	5	1 1	—	5	10 1	—	7	3 3
90	—	4	5 1	—	5	2 —	—	5	11 —	—	7	4 3
1	—	4	6 —	—	5	2 3	—	5	11 3	—	7	5 3
2	—	4	6 2	—	5	3 2	—	6	—	—	7	6 3
3	—	4	7 1	—	5	4 1	—	6	1 1	—	7	7 2
4	—	4	7 3	—	5	4 3	—	6	2 1	—	7	8 2
5	—	4	8 2	—	5	5 2	—	6	3 —	—	7	9 2
6	—	4	9 —	—	5	6 1	—	6	3 3	—	7	10 2
7	—	4	9 2	—	5	7 —	—	6	4 2	—	7	11 2
8	—	4	10 1	—	5	7 2	—	6	5 1	—	8	—
9	—	4	10 3	—	5	8 1	—	6	6 —	—	8	1 2
100	—	4	11 1	—	5	9 —	—	6	7 —	—	8	2 2
200	—	9	10 2	—	11	6 —	—	13	1 3	—	16	5 1
300	—	14	9 2	—	17	3 —	—	19	8 3	—	1	4 8 —
400	—	19	8 3	—	1	3 —	—	1	6 3 2	—	1	12 10 2
500	—	1	4 8 —	—	1	8 9 1	—	1	12 10 2	—	2	1 1 —
600	—	1	9 7 —	—	1	14 6 1	—	1	19 5 2	—	2	9 3 3
700	—	1	14 6 1	—	2	—	—	2	6 —	—	2	17 6 2
800	—	1	19 5 2	—	2	6 —	—	2	12 7 1	—	3	5 —
900	—	2	4 4 3	—	2	11 9 2	—	2	19 2 —	—	3	13 11 3
1000	—	2	9 3 3	—	2	17 6 2	—	3	5 9 —	—	4	2 2 1
2000	—	4	18 7 2	—	5	15 —	—	6	11 6 —	—	8	4 4 2

ONE MONTH.

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	2	—	—	3	—	—	3	—	—	4
2	—	—	1 1	—	—	1 2	—	—	1 2	—	—	2
3	—	—	1 3	—	—	2 1	—	—	2 2	—	—	3
4	—	—	2 2	—	—	2 3	—	—	3 1	—	—	4
5	—	—	3 —	—	—	3 2	—	—	4 —	—	—	5
6	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6
7	—	—	4 1	—	—	5 —	—	—	5 2	—	—	7
8	—	—	4 3	—	—	5 3	—	—	6 2	—	—	8
9	—	—	5 2	—	—	6 1	—	—	7 1	—	—	9
10	—	—	6 —	—	—	7 —	—	—	8 —	—	—	10
11	—	—	6 2	—	—	7 3	—	—	8 3	—	—	11
12	—	—	7 1	—	—	8 2	—	—	9 2	—	—	12
13	—	—	7 3	—	—	9 1	—	—	10 2	—	—	13
14	—	—	8 2	—	—	9 3	—	—	11 1	—	—	14
15	—	—	9 —	—	—	10 2	—	—	11 —	—	—	15
16	—	—	9 2	—	—	11 1	—	—	12 —	—	—	16
17	—	—	10 1	—	—	12 —	—	—	13 1	—	—	17
18	—	—	10 3	—	—	13 —	—	—	14 2	—	—	18
19	—	—	11 2	—	—	14 1	—	—	15 3	—	—	19
20	—	—	12 —	—	—	15 2	—	—	16 3	—	—	20
1	—	—	1 —	—	—	16 3	—	—	17 4	—	—	1
2	—	—	1 1	—	—	17 2	—	—	18 5	—	—	2
3	—	—	1 3	—	—	18 1	—	—	19 6	—	—	3
4	—	—	2 2	—	—	19 3	—	—	20 7	—	—	4
5	—	—	3 —	—	—	20 2	—	—	21 8	—	—	5
6	—	—	3 2	—	—	21 1	—	—	22 9	—	—	6
7	—	—	4 1	—	—	22 —	—	—	23 10	—	—	7
8	—	—	4 3	—	—	23 1	—	—	24 11	—	—	8
9	—	—	5 2	—	—	24 1	—	—	25 12	—	—	9
10	—	—	6 —	—	—	25 —	—	—	26 1	—	—	10
1	—	—	6 2	—	—	26 3	—	—	27 2	—	—	1
2	—	—	7 1	—	—	27 2	—	—	28 3	—	—	2
3	—	—	7 3	—	—	28 1	—	—	29 4	—	—	3
4	—	—	8 2	—	—	29 3	—	—	30 5	—	—	4
5	—	—	9 —	—	—	30 2	—	—	31 6	—	—	5
6	—	—	9 2	—	—	31 1	—	—	32 7	—	—	6
7	—	—	10 1	—	—	32 1	—	—	33 8	—	—	7
8	—	—	10 3	—	—	33 1	—	—	34 9	—	—	8
9	—	—	11 2	—	—	34 1	—	—	35 10	—	—	9
10	—	—	12 —	—	—	35 2	—	—	36 11	—	—	10
1	—	—	1 —	—	—	36 3	—	—	37 12	—	—	1
2	—	—	1 1	—	—	37 2	—	—	38 1	—	—	2
3	—	—	1 3	—	—	38 1	—	—	39 2	—	—	3
4	—	—	2 2	—	—	39 3	—	—	40 5	—	—	4
5	—	—	3 —	—	—	40 2	—	—	41 6	—	—	5
6	—	—	3 2	—	—	41 1	—	—	42 7	—	—	6
7	—	—	4 1	—	—	42 —	—	—	43 8	—	—	7
8	—	—	4 3	—	—	43 1	—	—	44 9	—	—	8
9	—	—	5 2	—	—	44 1	—	—	45 10	—	—	9
10	—	—	6 —	—	—	45 —	—	—	46 1	—	—	10
1	—	—	6 2	—	—	46 3	—	—	47 2	—	—	1
2	—	—	7 1	—	—	47 2	—	—	48 3	—	—	2
3	—	—	7 3	—	—	48 1	—	—	49 4	—	—	3
4	—	—	8 2	—	—	49 3	—	—	50 5	—	—	4
5	—	—	9 —	—	—	50 2	—	—	51 6	—	—	5
6	—	—	9 2	—	—	51 1	—	—	52 7	—	—	6
7	—	—	10 1	—	—	52 1	—	—	53 8	—	—	7
8	—	—	10 3	—	—	53 1	—	—	54 9	—	—	8
9	—	—	11 2	—	—	54 1	—	—	55 10	—	—	9
10	—	—	12 —	—	—	55 2	—	—	56 11	—	—	10
1	—	—	1 —	—	—	56 3	—	—	57 12	—	—	1
2	—	—	1 1	—	—	57 2	—	—	58 1	—	—	2
3	—	—	1 3	—	—	58 1	—	—	59 2	—	—	3
4	—	—	2 2	—	—	59 3	—	—	60 5	—	—	4
5	—	—	3 —	—	—	60 2	—	—	61 6	—	—	5
6	—	—	3 2	—	—	61 1	—	—	62 7	—	—	6
7	—	—	4 1	—	—	62 —	—	—	63 8	—	—	7
8	—	—	4 3	—	—	63 1	—	—	64 9	—	—	8
9	—	—	5 2	—	—	64 1	—	—	65 10	—	—	9
10	—	—	6 —	—	—	65 —	—	—	66 1	—	—	10
1	—	—	6 2	—	—	66 3	—	—	67 2	—	—	1
2	—	—	7 1	—	—	67 2	—	—	68 3	—	—	2
3	—	—	7 3	—	—	68 1	—	—	69 4	—	—	3
4	—	—	8 2	—	—	69 3	—	—	70 5	—	—	4
5	—	—	9 —	—	—	70 2	—	—	71 6	—	—	5
6	—	—	9 2	—	—	71 1	—	—	72 7	—	—	6
7	—	—	10 1	—	—	72 —	—	—	73 8	—	—	7
8	—	—	10 3	—	—	73 1	—	—	74 9	—	—	8
9	—	—	11 2	—	—	74 1	—	—	75 10	—	—	9
10	—	—	12 —	—	—	75 2	—	—	76 11	—	—	10
1	—	—	1 —	—	—	76 3	—	—	77 12	—	—	1
2	—	—	1 1	—	—	77 2	—	—	78 1	—	—	2
3	—	—	1 3	—	—	78 1	—	—	79 2	—	—	3
4	—	—	2 2	—	—	79 3	—	—	80 5	—	—	4
5	—	—	3 —	—	—	80 2	—	—	81 6	—	—	5
6	—	—	3 2	—	—	81 1	—	—	82 7	—	—	6
7	—	—	4 1	—	—	82 —	—	—	83 8	—	—	7
8	—	—	4 3	—	—	83 1	—	—	84 9	—	—	8
9	—	—	5 2	—	—	84 1	—	—	85 10	—	—	9
10	—	—	6 —	—	—	85 —	—	—	86 1	—	—	10
1	—	—	6 2	—	—	86 3	—	—	87 2	—	—	1
2	—	—	7 1	—	—	87 2	—	—	88 3	—	—	2
3	—	—	7 3	—	—	88 1	—	—	89 4	—	—	3
4	—	—	8 2	—	—	89 3	—	—	90 5	—	—	4
5	—	—	9 —	—	—	90 2	—	—	91 6	—	—	5
6	—	—	9 2	—	—	91 1	—	—	92 7	—	—	6
7	—	—	10 1	—	—	92 —	—	—	93 8	—	—	7
8	—	—	10 3	—	—	93 1	—	—	94 9	—	—	8
9	—	—	11 2	—	—	94 1	—	—	95 10	—	—	9
10	—	—	12 —	—	—	95 2	—	—	96 11	—	—	10
1	—	—	1 —	—	—	96 3	—	—	97 12	—	—	1
2	—	—	1 1	—	—	97 2	—	—	98 1	—	—	2
3	—	—	1 3	—	—	98 1	—	—	99 2	—	—	3
4	—	—	2 2	—	—	99 3	—	—	100 5	—	—	4
5	—	—	3 —	—	—	100 2	—	—	101 6	—	—	5
6	—	—	3 2	—	—	101 1	—	—	102 7	—	—	6
7	—	—	4 1	—	—	102 —	—	—	103 8	—	—	7
8	—	—	4 3	—	—	103 1	—	—	104 9	—	—	8
9	—	—	5 2	—	—	104 1	—	—	105 10	—	—	9
10	—	—	6 —	—	—	105 —	—	—	106 1	—	—	10
1	—	—	6 2	—	—	106 3	—	—	107 2	—	—	1
2	—	—	7 1	—	—	107 2	—	—	108 3	—	—	2
3	—	—	7 3	—	—	108 1	—	—	109 4	—	—	3
4	—	—	8 2	—	—	109 3	—	—	110 5	—	—	4
5	—	—	9 —	—	—	110 2	—	—	111 6	—	—	5
6	—	—	9 2	—	—	111 1	—	—	112 7	—	—	6
7	—	—	10 1	—	—	112 —	—	—	113 8	—	—	7
8	—	—	10 3	—	—	113 1	—	—	114 9	—	—	8
9	—	—	11 2	—	—	114 1	—	—	115 10	—	—	9
10	—	—	12 —	—	—	115 2	—	—	116 11	—	—	10
1	—	—	1 —	—	—	116 3	—	—	117 12	—	—	1
2	—	—	1 1	—	—	117 2	—	—	118 1	—	—	2
3	—	—	1 3	—	—	118 1	—	—	119 2	—	—	3
4	—	—	2 2	—	—	119 3	—	—	120 5	—	—	4
5	—	—	3 —	—	—	120 2	—	—	121 6	—	—	5
6	—	—	3 2	—	—	121 1	—	—	122 7	—	—	6
7	—	—	4 1	—	—	122 —	—	—	123 8	—	—	7
8	—	—	4 3	—	—	123 1	—	—	124 9	—	—	8
9	—	—	5 2	—	—	124 1	—	—	125 10	—	—	9
10	—	—	6 —	—	—	125 —	—	—	126 1	—	—	10
1	—	—	6 2	—	—	126 3	—	—	127 2	—	—	1
2	—	—	7 1	—	—	127 2	—	—	128 3	—	—	2
3	—	—	7 3	—	—	128 1	—	—	129 4	—	—	3
4	—	—	8 2	—	—	129 3	—	—	130 5	—	—	4
5	—	—	9 —	—	—	130 2	—	—	131 6	—	—	5
6	—	—	9 2									

ONE MONTH.

423

L. at	3 per Cent.			3 1/2 p. Cent.	4 per Cent.	5 per Cent.
	l.	s.	d. f.	l.	s.	d. f.
56	—	2	9 3	—	3	8 3
7	—	2	10 1	—	3	9 3
8	—	2	11 —	—	3	10 2
9	—	2	11 2	—	3	11 1
60	—	3	—	—	4	—
1	—	3	— 2	—	4	— 3
2	—	3	1 1	—	4	1 2
3	—	3	1 3	—	4	2 2
4	—	3	2 2	—	4	3 1
5	—	3	3 —	—	4	4 —
6	—	3	3 3	—	4	4 3
7	—	3	4 1	—	4	5 2
8	—	3	5 —	—	4	6 2
9	—	3	5 2	—	4	7 1
70	—	3	6 —	—	4	8 —
1	—	3	6 2	—	4	8 3
2	—	3	7 1	—	4	9 3
3	—	3	7 3	—	4	10 2
4	—	3	8 2	—	4	11 1
5	—	3	9 —	—	5	—
6	—	3	9 3	—	5	— 3
7	—	3	10 1	—	5	1 2
8	—	3	11 —	—	5	2 2
9	—	3	11 2	—	5	3 1
80	—	4	—	—	5	4 —
1	—	4	— 2	—	5	4 3
2	—	4	1 1	—	5	5 2
3	—	4	1 3	—	5	6 2
4	—	4	2 2	—	5	7 1
5	—	4	3 —	—	5	8 —
6	—	4	3 3	—	5	8 3
7	—	4	4 1	—	5	9 3
8	—	4	5 —	—	5	10 2
9	—	4	5 2	—	5	11 1
90	—	4	6 —	—	6	—
1	—	4	6 2	—	6	— 3
2	—	4	7 1	—	6	1 2
3	—	4	7 3	—	6	2 2
4	—	4	8 2	—	6	3 1
5	—	4	9 —	—	6	4 —
6	—	4	9 3	—	6	4 3
7	—	4	10 2	—	6	5 2
8	—	4	11 —	—	6	6 2
9	—	4	11 2	—	6	7 1
100	—	5	—	—	6	8 —
200	—	10	—	—	13	4 —
300	—	15	—	—	1	—
400	1	—	—	1	3	4 —
500	1	5	—	1	9	2 —
600	1	10	—	1	15	—
700	1	15	—	2	—	10 —
800	2	—	—	2	6	8 —
900	2	5	—	2	12	6 —
1000	2	10	—	2	18	4 —
2000	5	—	—	5	16	8 —

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1 1	—	—	1 2	—	—	1 2	—	—	2 —
2	—	—	2 2	—	—	2 3	—	—	3 1	—	—	4 —
3	—	—	3 2	—	—	4 1	—	—	4 3	—	—	6 —
4	—	—	4 3	—	—	5 2	—	—	6 2	—	—	8 —
5	—	—	6 —	—	—	7 —	—	—	8 —	—	—	10 —
6	—	—	7 1	—	—	8 2	—	—	9 3	—	1	—
7	—	—	8 2	—	—	9 3	—	—	11 1	—	1	2 —
8	—	—	9 2	—	—	11 1	—	—	1 —	—	1	4 —
9	—	—	10 3	—	—	1 —	—	—	2 2	—	1	6 —
10	—	1	—	—	—	1 2 —	—	—	1 4 —	—	1	8 —
11	—	1	1 1	—	—	1 3 2	—	—	1 5 2	—	1	10 —
12	—	1	2 2	—	—	1 4 3	—	—	1 7 1	—	2	—
13	—	1	3 2	—	—	1 6 1	—	—	1 8 3	—	2	2 —
14	—	1	4 3	—	—	1 7 2	—	—	1 10 2	—	2	4 —
15	—	1	6 —	—	—	1 9 —	—	—	2 —	—	2	6 —
16	—	1	7 1	—	—	1 10 2	—	—	2 1 2	—	2	8 —
17	—	1	8 2	—	—	1 11 3	—	—	2 3 1	—	2	10 —
18	—	1	9 2	—	—	2 1 1	—	—	2 4 3	—	3	—
19	—	1	10 3	—	—	2 2 2	—	—	2 6 2	—	3	2 —
20	—	2	—	—	—	2 4 —	—	—	2 8 —	—	3	4 —
1	—	2	1 1	—	—	2 5 2	—	—	2 9 3	—	3	6 —
2	—	2	2 2	—	—	2 6 3	—	—	2 11 1	—	3	8 —
3	—	2	3 2	—	—	2 8 1	—	—	3 — 3	—	3	10 —
4	—	2	4 3	—	—	2 9 2	—	—	3 2 2	—	4	—
5	—	2	6 —	—	—	2 11 —	—	—	3 4 —	—	4	2 —
6	—	2	7 1	—	—	3 — 2	—	—	3 5 3	—	4	4 —
7	—	2	8 2	—	—	3 1 3	—	—	3 7 1	—	4	6 —
8	—	2	9 2	—	—	3 3 1	—	—	3 9 —	—	4	8 —
9	—	2	10 3	—	—	3 4 2	—	—	3 10 2	—	4	10 —
30	—	3	—	—	—	3 6 —	—	—	4 —	—	5	—
1	—	3	1 1	—	—	3 7 2	—	—	4 1 2	—	5	2 —
2	—	3	2 2	—	—	3 8 3	—	—	4 3 1	—	5	4 —
3	—	3	3 2	—	—	3 10 1	—	—	4 4 3	—	5	6 —
4	—	3	4 3	—	—	3 11 2	—	—	4 6 2	—	5	8 —
5	—	3	6 —	—	—	4 1 —	—	—	4 8 —	—	5	10 —
6	—	3	7 1	—	—	4 2 2	—	—	4 9 3	—	6	—
7	—	3	8 2	—	—	4 3 3	—	—	4 11 1	—	6	2 —
8	—	3	9 2	—	—	4 5 1	—	—	5 — 3	—	6	4 —
9	—	3	10 3	—	—	4 6 2	—	—	5 2 2	—	6	6 —
40	—	4	—	—	—	4 8 —	—	—	5 4 —	—	6	8 —
1	—	4	1 1	—	—	4 9 2	—	—	5 5 2	—	6	10 —
2	—	4	2 2	—	—	4 10 3	—	—	5 7 1	—	7	—
3	—	4	3 2	—	—	5 — 1	—	—	5 8 3	—	7	2 —
4	—	4	4 3	—	—	5 1 2	—	—	5 10 2	—	7	4 —
5	—	4	6 —	—	—	5 3 —	—	—	6 —	—	7	6 —
6	—	4	7 1	—	—	5 4 2	—	—	6 1 2	—	7	8 —
7	—	4	8 2	—	—	5 5 3	—	—	6 3 1	—	7	10 —
8	—	4	9 2	—	—	5 7 1	—	—	6 4 3	—	8	—
9	—	4	10 3	—	—	5 8 2	—	—	6 6 2	—	8	2 —
30	—	5	—	—	—	5 10 —	—	—	6 8 —	—	8	4 —
1	—	5	1 1	—	—	5 11 2	—	—	6 9 3	—	8	6 —
2	—	5	2 2	—	—	6 — 3	—	—	6 11 1	—	8	8 —
3	—	5	3 2	—	—	6 2 1	—	—	7 — 3	—	8	10 —
4	—	5	4 3	—	—	6 3 2	—	—	7 2 2	—	9	—
5	—	5	6 —	—	—	6 5 —	—	—	7 4 —	—	9	2 —

Two MONTHS.

425

L. at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	5	7 1	—	6	6 1	—	7	5 3	—	9	4 —
7	—	5	8 2	—	6	7 3	—	7	7 1	—	9	6 —
8	—	5	9 3	—	6	9 —	—	7	9 —	—	9	8 —
9	—	5	10 3	—	6	10 2	—	7	10 2	—	9	10 —
60	—	6	— —	—	7	— —	—	8	— —	—	10	— —
1	—	6	1 1	—	7	1 2	—	8	1 2	—	10	2 —
2	—	6	2 2	—	7	2 3	—	8	3 1	—	10	4 —
3	—	6	3 3	—	7	4 1	—	8	4 3	—	10	6 —
4	—	6	4 3	—	7	5 2	—	8	6 2	—	10	8 —
5	—	6	6 —	—	7	7 —	—	8	8 —	—	10	10 —
6	—	6	7 1	—	7	8 1	—	8	9 3	—	11	— —
7	—	6	8 2	—	7	9 3	—	8	11 1	—	11	2 —
8	—	6	9 3	—	7	11 —	—	9	1 —	—	11	4 —
9	—	6	10 3	—	8	— 2	—	9	2 2	—	11	6 —
70	—	7	— —	—	8	2 —	—	9	4 —	—	11	8 —
1	—	7	1 1	—	8	3 2	—	9	5 2	—	11	10 —
2	—	7	2 2	—	8	4 3	—	9	7 1	—	12	— —
3	—	7	3 3	—	8	6 1	—	9	8 3	—	12	2 —
4	—	7	4 3	—	8	7 3	—	9	10 2	—	12	4 —
5	—	7	6 —	—	8	9 —	—	10	— —	—	12	6 —
6	—	7	7 1	—	8	10 2	—	10	1 3	—	12	8 —
7	—	7	8 2	—	8	11 3	—	10	3 1	—	12	10 —
8	—	7	9 3	—	9	1 1	—	10	5 —	—	13	— —
9	—	7	10 3	—	9	2 2	—	10	6 2	—	13	2 —
80	—	8	— —	—	9	4 —	—	10	8 —	—	13	4 —
1	—	8	1 1	—	9	5 2	—	10	9 2	—	13	6 —
2	—	8	2 2	—	9	6 3	—	10	11 1	—	13	8 —
3	—	8	3 3	—	9	8 1	—	11	— 3	—	13	10 —
4	—	8	4 3	—	9	9 2	—	11	2 2	—	14	— —
5	—	8	6 —	—	9	11 —	—	11	4 —	—	14	2 —
6	—	8	7 1	—	10	— 1	—	11	5 3	—	14	4 —
7	—	8	8 2	—	10	1 3	—	11	7 1	—	14	6 —
8	—	8	9 3	—	10	3 —	—	11	9 —	—	14	8 —
9	—	8	10 3	—	10	4 2	—	11	10 2	—	14	10 —
90	—	9	— —	—	10	6 —	—	12	— —	—	15	— —
1	—	9	1 1	—	10	7 2	—	12	1 2	—	15	2 —
2	—	9	2 2	—	10	8 3	—	12	3 1	—	15	4 —
3	—	9	3 3	—	10	10 1	—	12	4 3	—	15	6 —
4	—	9	4 3	—	10	11 2	—	12	6 2	—	15	8 —
5	—	9	6 —	—	11	1 —	—	12	8 —	—	15	10 —
6	—	9	7 1	—	11	2 1	—	12	9 3	—	16	— —
7	—	9	8 2	—	11	3 3	—	12	11 1	—	16	2 —
8	—	9	9 3	—	11	5 1	—	13	1 —	—	16	4 —
9	—	9	10 3	—	11	6 2	—	13	2 2	—	16	6 —
100	—	10	— —	—	11	8 —	—	13	4 —	—	16	8 —
200	1	—	— —	1	3 4 —	—	1	6 8 —	—	1	13 4 —	—
300	1	10	— —	1	15 — —	—	2	— — —	—	2	10 — —	—
400	2	—	— —	2	6 8 —	—	2	13 4 —	—	3	6 8 —	—
500	2	10	— —	2	18 4 —	—	3	6 8 —	—	4	3 4 —	—
600	3	—	— —	3	10 — —	—	4	— — —	—	5	— — —	—
700	3	10	— —	4	1 8 —	—	4	13 4 —	—	5	16 8 —	—
800	4	—	— —	4	13 4 —	—	5	6 8 —	—	6	13 4 —	—
900	4	10	— —	5	5 — —	—	6	— — —	—	7	10 — —	—
1000	5	—	— —	5	16 8 —	—	6	13 4 —	—	8	6 8 —	—
2000	10	—	— —	11	13 4 —	—	13	6 8 —	—	16	13 4 —	—

L. at	3 per Cent.			3½ per Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	1 3	—	—	2 1	—	—	2 2	—	—	3 —
2	—	—	3 3	—	—	4 1	—	—	2 —	—	—	6 —
3	—	—	5 2	—	—	6 1	—	—	7 1	—	—	9 —
4	—	—	7 1	—	—	8 2	—	—	9 3	—	1	—
5	—	—	9 —	—	—	10 2	—	—	1 —	—	1	3 —
6	—	—	10 3	—	1	— 3	—	—	1 2 2	—	1	6 —
7	—	1	— 2	—	1 2 3	—	—	1	5 —	—	1	9 —
8	—	1	2 2	—	1 4 3	—	—	1	7 1	—	2	—
9	—	1	4 1	—	1 6 3	—	—	1	9 3	—	2	3 —
10	—	1	6 —	—	1 9 —	—	—	2	—	—	2	6 —
11	—	1	7 3	—	1 11 1	—	—	2	2 2	—	2	9 —
12	—	1	9 3	—	2 1 1	—	—	2	5 —	—	3	—
13	—	1	11 2	—	2 3 1	—	—	2	7 1	—	3	3 —
14	—	2	1 1	—	2 5 2	—	—	2	9 3	—	3	6 —
15	—	2	3 —	—	2 7 2	—	—	3	—	—	3	9 —
16	—	2	4 3	—	2 9 3	—	—	3	2 2	—	4	—
17	—	2	6 2	—	2 11 3	—	—	3	5 —	—	4	3 —
18	—	2	8 2	—	3 1 3	—	—	3	7 1	—	4	6 —
19	—	2	10 1	—	3 3 3	—	—	3	9 3	—	4	9 —
20	—	3	—	—	3 6 —	—	—	4	—	—	5	—
1	—	3	1 3	—	3 8 1	—	—	4	2 2	—	5	3 —
2	—	3	3 3	—	3 10 1	—	—	4	5 —	—	5	6 —
3	—	3	5 2	—	4 — 1	—	—	4	7 1	—	5	9 —
4	—	3	7 1	—	4 2 2	—	—	4	9 3	—	6	—
5	—	3	9 —	—	4 4 2	—	—	5	—	—	6	3 —
6	—	3	10 3	—	4 6 3	—	—	5	2 2	—	6	6 —
7	—	4	— 2	—	4 8 3	—	—	5	5 —	—	6	9 —
8	—	4	2 2	—	4 10 3	—	—	5	7 1	—	7	—
9	—	4	4 1	—	5 — 3	—	—	5	9 3	—	7	3 —
30	—	4	6 —	—	5 3 —	—	—	6	—	—	7	6 —
1	—	4	7 3	—	5 5 1	—	—	6	2 2	—	7	9 —
2	—	4	9 3	—	5 7 1	—	—	6	5 —	—	8	—
3	—	4	11 2	—	5 9 1	—	—	6	7 1	—	8	3 —
4	—	5	1 1	—	5 11 2	—	—	6	9 3	—	8	6 —
5	—	5	3 —	—	6 1 2	—	—	7	—	—	8	9 —
6	—	5	4 3	—	6 3 3	—	—	7	2 2	—	9	—
7	—	5	6 2	—	6 5 3	—	—	7	5 —	—	9	3 —
8	—	5	8 2	—	6 7 3	—	—	7	7 1	—	9	6 —
9	—	5	10 1	—	6 9 3	—	—	7	9 3	—	9	9 —
40	—	6	—	—	7 —	—	—	8	—	—	10	—
1	—	6	1 3	—	7 2 1	—	—	8	2 2	—	10	3 —
2	—	6	3 3	—	7 4 1	—	—	8	5 —	—	10	6 —
3	—	6	5 2	—	7 6 1	—	—	8	7 1	—	10	9 —
4	—	6	7 1	—	7 8 2	—	—	8	9 3	—	11	—
5	—	6	9 —	—	7 10 2	—	—	9	—	—	11	3 —
6	—	6	10 3	—	8 — 3	—	—	9	2 2	—	11	6 —
7	—	7	— 2	—	8 2 3	—	—	9	5 —	—	11	9 —
8	—	7	2 2	—	8 4 3	—	—	9	7 1	—	12	—
9	—	7	4 1	—	8 6 3	—	—	9	9 3	—	12	3 —
50	—	7	6 —	—	8 9 —	—	—	10	—	—	12	6 —
1	—	7	7 3	—	8 11 1	—	—	10	2 2	—	12	9 —
2	—	7	9 3	—	9 1 1	—	—	10	5 —	—	13	—
3	—	7	11 2	—	9 3 1	—	—	10	7 1	—	13	3 —
4	—	8	1 1	—	9 5 2	—	—	10	9 3	—	13	6 —
5	—	8	3 —	—	9 7 2	—	—	11	—	—	13	9 —

THREE MONTHS.

427

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	8	4 3	—	9	9 3	—	11	2 2	—	14	—
7	—	8	6 2	—	9	11 3	—	11	5 —	—	14	3 —
8	—	8	8 2	—	10	1 3	—	11	7 1	—	14	6 —
9	—	8	10 1	—	10	3 3	—	11	9 3	—	14	9 —
60	—	9	—	—	10	6 —	—	12	—	—	15	—
1	—	9	1 3	—	10	8 1	—	12	2 2	—	15	3 —
2	—	9	3 3	—	10	10 1	—	12	5 —	—	15	6 —
3	—	9	5 2	—	11	— 1	—	12	7 1	—	15	9 —
4	—	9	7 1	—	11	2 2	—	12	9 3	—	16	—
5	—	9	9 —	—	11	4 2	—	13	—	—	16	3 —
6	—	9	10 3	—	11	6 3	—	13	2 2	—	16	6 —
7	—	10	— 2	—	11	8 3	—	13	5 —	—	16	9 —
8	—	10	2 2	—	11	10 3	—	13	7 1	—	17	—
9	—	10	4 1	—	12	— 3	—	13	9 3	—	17	3 —
70	—	10	6 —	—	12	3 —	—	14	—	—	17	6 —
1	—	10	7 3	—	12	5 1	—	14	2 2	—	17	9 —
2	—	10	9 2	—	12	7 1	—	14	5 —	—	18	—
3	—	10	11 2	—	12	9 1	—	14	7 1	—	18	3 —
4	—	11	1 1	—	12	11 2	—	14	9 3	—	18	6 —
5	—	11	3 —	—	13	1 2	—	15	—	—	18	9 —
6	—	11	4 3	—	13	3 3	—	15	2 2	—	19	—
7	—	11	6 2	—	13	5 3	—	15	5 —	—	19	3 —
8	—	11	8 2	—	13	7 3	—	15	7 1	—	19	6 —
9	—	11	10 1	—	13	9 3	—	15	9 3	—	19	9 —
80	—	12	—	—	14	—	—	16	—	—	1	—
1	—	12	1 3	—	14	2 1	—	16	2 2	—	1	3 —
2	—	12	3 3	—	14	4 1	—	16	5 —	—	1	6 —
3	—	12	5 2	—	14	6 1	—	16	7 1	—	1	9 —
4	—	12	7 1	—	14	8 2	—	16	9 3	—	1	—
5	—	12	9 —	—	14	10 2	—	17	—	—	1	1 3 —
6	—	12	10 3	—	15	— 3	—	17	2 2	—	1	1 6 —
7	—	13	— 2	—	15	2 3	—	17	5 —	—	1	1 9 —
8	—	13	2 3	—	15	4 3	—	17	7 1	—	1	2 —
9	—	13	4 1	—	15	6 3	—	17	9 3	—	1	2 3 —
90	—	13	6 —	—	15	9 —	—	18	—	—	1	2 6 —
1	—	13	7 3	—	15	11 1	—	18	2 2	—	1	2 9 —
2	—	13	9 3	—	16	1 1	—	18	5 —	—	1	3 —
3	—	13	11 2	—	16	3 1	—	18	7 1	—	1	3 3 —
4	—	14	1 1	—	16	5 2	—	18	9 3	—	1	3 6 —
5	—	14	3 —	—	16	7 2	—	19	—	—	1	3 9 —
6	—	14	4 3	—	16	9 3	—	19	2 2	—	1	4 —
7	—	14	6 2	—	16	11 3	—	19	5 —	—	1	4 3 —
8	—	14	8 2	—	17	1 3	—	19	7 1	—	1	4 6 —
9	—	14	10 1	—	17	3 3	—	19	9 3	—	1	4 9 —
100	—	15	—	—	17	6 —	—	1	—	—	1	5 —
200	1	10	—	—	1	15 —	—	2	—	—	2	10 —
300	2	5	—	—	2	12 6 —	—	3	—	—	3	15 —
400	3	—	—	—	3	10 —	—	4	—	—	5	—
500	3	15	—	—	4	7 6 —	—	5	—	—	6	5 —
600	4	10	—	—	5	5 —	—	6	—	—	7	10 —
700	5	5	—	—	6	2 6 —	—	7	—	—	8	15 —
800	6	—	—	—	7	—	—	8	—	—	10	—
900	6	15	—	—	7	17 6 —	—	9	—	—	11	5 —
1000	7	10	—	—	8	15 —	—	10	—	—	12	10 —
2000	15	—	—	—	17	10 —	—	20	—	—	25	—

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	2 2	—	—	2 3	—	—	3 1	—	—	4 —
2	—	—	5 —	—	—	5 2	—	—	9 2	—	—	8 —
3	—	—	7 1	—	—	8 2	—	—	6 3	—	1 —	—
4	—	—	9 3	—	—	11 1	—	1 —	3 —	—	1 4 —	—
5	—	1 —	—	—	1 2 —	—	—	1 4 —	—	—	1 8 —	—
6	—	1 2 2	—	—	1 4 3	—	—	1 7 1	—	2 —	—	—
7	—	1 5 —	—	—	1 7 2	—	—	1 10 2	—	2 4 —	—	—
8	—	1 7 1	—	—	1 10 2	—	2 —	1 2 —	—	2 8 —	—	—
9	—	1 9 3	—	2 —	1 1 —	—	2 —	4 3 —	—	3 —	—	—
10	—	2 —	—	—	2 4 —	—	2 —	8 —	—	3 4 —	—	—
11	—	2 2 2	—	—	2 6 3	—	2 —	11 1 —	—	3 8 —	—	—
12	—	2 5 —	—	—	2 9 2	—	3 —	2 2 —	—	4 —	—	—
13	—	2 7 1	—	—	3 — 2	—	3 —	5 3 —	—	4 4 —	—	—
14	—	2 9 3	—	—	3 3 1	—	3 —	8 3 —	—	4 8 —	—	—
15	—	3 —	—	—	3 6 —	—	4 —	—	—	5 —	—	—
16	—	3 2 2	—	—	3 8 3	—	4 —	3 1 —	—	5 4 —	—	—
17	—	3 5 —	—	—	3 11 2	—	4 —	6 2 —	—	5 8 —	—	—
18	—	3 7 1	—	—	4 2 2	—	4 —	9 3 —	—	6 —	—	—
19	—	3 9 3	—	—	4 5 1	—	5 —	3 —	—	6 4 —	—	—
20	—	4 —	—	—	4 8 —	—	5 —	4 —	—	6 8 —	—	—
1	—	4 2 2	—	—	4 10 3	—	5 —	7 1 —	—	7 —	—	—
2	—	4 5 —	—	—	5 1 2	—	5 —	10 2 —	—	7 4 —	—	—
3	—	4 7 1	—	—	5 4 2	—	6 —	1 2 —	—	7 8 —	—	—
4	—	4 9 3	—	—	5 7 1	—	6 —	4 3 —	—	8 —	—	—
5	—	5 —	—	—	5 10 —	—	6 —	8 —	—	8 4 —	—	—
6	—	5 2 2	—	—	6 — 3	—	6 —	11 1 —	—	8 8 —	—	—
7	—	5 5 —	—	—	6 3 2	—	7 —	2 2 —	—	9 —	—	—
8	—	5 7 1	—	—	6 6 2	—	7 —	5 3 —	—	9 4 —	—	—
9	—	5 9 3	—	—	6 9 1	—	7 —	8 3 —	—	9 8 —	—	—
30	—	6 —	—	—	7 —	—	8 —	—	—	10 —	—	—
1	—	6 2 2	—	—	7 2 3	—	8 —	3 1 —	—	10 4 —	—	—
2	—	6 5 —	—	—	7 5 2	—	8 —	6 2 —	—	10 8 —	—	—
3	—	6 7 1	—	—	7 8 2	—	8 —	9 3 —	—	11 —	—	—
4	—	6 9 3	—	—	7 11 1	—	9 —	3 —	—	11 4 —	—	—
5	—	7 —	—	—	8 2 —	—	9 —	4 —	—	11 8 —	—	—
6	—	7 2 2	—	—	8 4 3	—	9 —	7 1 —	—	12 —	—	—
7	—	7 5 —	—	—	8 7 2	—	9 —	10 2 —	—	12 4 —	—	—
8	—	7 7 1	—	—	8 10 2	—	10 —	1 3 —	—	12 8 —	—	—
9	—	7 9 3	—	—	9 1 1	—	10 —	4 3 —	—	13 —	—	—
40	—	8 —	—	—	9 4 —	—	10 —	8 —	—	13 4 —	—	—
1	—	8 2 2	—	—	9 6 3	—	10 —	11 1 —	—	13 8 —	—	—
2	—	8 5 —	—	—	9 9 2	—	11 —	2 2 —	—	14 —	—	—
3	—	8 7 1	—	—	10 —	—	11 —	5 3 —	—	14 4 —	—	—
4	—	8 9 3	—	—	10 3 1	—	11 —	8 3 —	—	14 8 —	—	—
5	—	9 —	—	—	10 6 —	—	12 —	—	—	15 —	—	—
6	—	9 2 2	—	—	10 8 3	—	12 —	3 1 —	—	15 4 —	—	—
7	—	9 5 —	—	—	10 11 2	—	12 —	6 2 —	—	15 8 —	—	—
8	—	9 7 1	—	—	11 2 2	—	12 —	9 3 —	—	16 —	—	—
9	—	9 9 3	—	—	11 5 1	—	13 —	3 —	—	16 4 —	—	—
50	—	10 —	—	—	11 8 —	—	13 —	4 —	—	16 8 —	—	—
1	—	10 2 2	—	—	11 10 3	—	13 —	7 1 —	—	17 —	—	—
2	—	10 5 —	—	—	12 1 2	—	13 —	10 2 —	—	17 4 —	—	—
3	—	10 7 1	—	—	12 4 2	—	14 —	1 2 —	—	17 8 —	—	—
4	—	10 9 3	—	—	12 7 1	—	14 —	4 3 —	—	18 —	—	—
5	—	11 —	—	—	12 10 —	—	14 —	8 —	—	18 4 —	—	—

FOUR MONTHS.

429

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	11	2 2	—	13	— 3	—	14	11 —	—	18	8 —
7	—	11	5 —	—	13	3 2	—	13	2 1	—	19	— —
8	—	11	7 1	—	13	6 1	—	15	5 2	—	19	4 —
9	—	11	9 3	—	13	9 —	—	15	8 3	—	19	8 —
60	—	12	— —	—	14	— —	—	16	— —	1	—	— —
1	—	12	2 2	—	14	2 3	—	16	3 1	1	—	4 —
2	—	12	5 —	—	14	5 2	—	16	6 2	1	—	8 —
3	—	12	7 1	—	14	8 1	—	16	9 3	1	1	— —
4	—	12	9 3	—	14	11 —	—	17	— 3	1	1	4 —
5	—	13	— —	—	15	2 —	—	17	4 —	1	1	8 —
6	—	13	2 2	—	15	4 3	—	17	7 1	1	2	— —
7	—	13	5 —	—	15	7 2	—	17	10 2	1	2	4 —
8	—	13	7 1	—	15	10 1	—	18	1 3	1	2	8 —
9	—	13	9 3	—	16	1 —	—	18	5 —	1	3	— —
70	—	14	— —	—	16	4 —	—	18	8 —	1	3	4 —
1	—	14	2 2	—	16	6 3	—	18	11 1	1	3	8 —
2	—	14	5 —	—	16	9 2	—	19	2 2	1	4	— —
3	—	14	7 1	—	17	— 1	—	19	5 3	1	4	4 —
4	—	14	9 3	—	17	3 —	—	19	9 —	1	4	8 —
5	—	15	— —	—	17	6 —	1	— —	—	1	5	— —
6	—	15	2 2	—	17	8 3	1	— 3 1	1	5	4 —	
7	—	15	5 —	—	17	11 2	1	— 6 2	1	5	8 —	
8	—	15	7 1	—	18	2 1	1	— 9 3	1	6	— —	
9	—	15	9 3	—	18	5 —	1	— 3	1	6	4 —	
80	—	16	— —	—	18	8 —	1	1 4 —	1	6	8 —	
1	—	16	2 2	—	18	10 3	1	1 1 7 1	1	7	— —	
2	—	16	5 —	—	19	1 2	1	1 1 10 2	1	7	4 —	
3	—	16	7 1	—	19	4 1	1	2 1 3	1	7	8 —	
4	—	16	9 3	—	19	7 —	1	2 5 —	1	8	— —	
5	—	17	— —	—	19	10 —	1	2 8 —	1	8	4 —	
6	—	17	2 2	1	— 3	1	2 11 1	1	8 8 —	1	8	8 —
7	—	17	5 —	1	— 3 2	1	3 2 2	1	9 — —	1	9	— —
8	—	17	7 1	1	— 6 1	1	3 5 3	1	9 4 —	1	9	4 —
9	—	17	9 3	1	— 9 —	1	3 9 —	1	9 8 —	1	9	8 —
90	—	18	— —	1	1 — —	1	4 — —	1	10 — —	1	10	— —
1	—	18	2 2	1	1 2 3	1	4 3 1	1	10 4 —	1	10	4 —
2	—	18	5 —	1	1 5 2	1	4 6 2	1	10 8 —	1	10	8 —
3	—	18	7 1	1	1 8 1	1	4 9 3	1	11 — —	1	11	— —
4	—	18	9 3	1	1 11 —	1	5 — 3	1	11 4 —	1	11	4 —
5	—	19	— —	1	2 2 —	1	5 4 —	1	11 8 —	1	11	8 —
6	—	19	2 2	1	2 4 3	1	5 7 1	1	12 — —	1	12	— —
7	—	19	5 —	1	2 7 2	1	5 10 2	1	12 4 —	1	12	4 —
8	—	19	7 1	1	2 10 1	1	6 1 3	1	12 8 —	1	12	8 —
9	—	19	9 3	1	3 1 —	1	6 5 —	1	13 — —	1	13	— —
100	1	— — —	1	3 4 —	1	6 8 —	1	6 8 —	1	13 4 —	1	13 4 —
200	2	— — —	2	6 8 —	2	13 4 —	2	13 4 —	3	6 8 —	3	6 8 —
300	3	— — —	3	10 — —	4	— — —	4	— — —	5	— — —	5	— — —
400	4	— — —	4	13 4 —	5	6 8 —	5	6 8 —	6	13 4 —	6	13 4 —
500	5	— — —	5	16 8 —	6	13 4 —	6	13 4 —	8	6 8 —	8	6 8 —
600	6	— — —	6	— — —	7	— — —	8	— — —	10	— — —	10	— — —
700	7	— — —	7	3 4 —	8	6 8 —	9	6 8 —	11	13 4 —	11	13 4 —
800	8	— — —	8	6 8 —	9	6 8 —	10	13 4 —	13	6 8 —	13	6 8 —
900	9	— — —	9	10 10 —	10	10 — —	12	— — —	15	— — —	15	— — —
1000	10	— — —	10	13 4 —	11	13 4 —	13	6 8 —	16	13 4 —	16	13 4 —
2000	20	— — —	20	23 6 8 —	23	6 8 —	26	13 8 —	33	6 8 —	33	6 8 —

L. at	3 per Cent.			3 1/2 per Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	3	—	—	3 2	—	—	4	—	—	5
2	—	—	6	—	—	7	—	—	8	—	—	10
3	—	—	9	—	—	10 2	—	—	1	—	—	1
4	—	1	—	—	1	2	—	1	4	—	—	3
5	—	1	3	—	1	5 2	—	1	8	—	—	1
6	—	1	6	—	1	9	—	2	—	—	2	6
7	—	1	9	—	2	—	2	2	4	—	—	1
8	—	2	—	—	2	4	—	2	8	—	—	4
9	—	2	3	—	2	7 2	—	3	—	—	3	9
10	—	2	6	—	2	11	—	3	4	—	—	2
11	—	2	9	—	3	2 2	—	3	8	—	—	7
12	—	3	—	—	3	6	—	4	—	—	5	—
13	—	3	3	—	3	9 2	—	4	4	—	—	5
14	—	3	6	—	4	—	—	4	8	—	—	10
15	—	3	9	—	4	4 2	—	5	—	—	6	3
16	—	4	—	—	4	8	—	5	4	—	—	8
17	—	4	3	—	4	11 2	—	5	8	—	—	1
18	—	4	6	—	5	3	—	6	—	—	7	6
19	—	4	9	—	5	6 2	—	6	4	—	—	11
20	—	5	—	—	5	10	—	6	8	—	—	4
1	—	5	3	—	6	1 2	—	7	—	—	8	9
2	—	5	6	—	6	5	—	7	4	—	—	2
3	—	5	9	—	6	8 2	—	7	8	—	—	7
4	—	6	—	—	7	—	—	8	—	—	10	—
5	—	6	3	—	7	3 2	—	8	4	—	—	5
6	—	6	6	—	7	7	—	8	8	—	—	10
7	—	6	9	—	7	10 2	—	9	—	—	11	3
8	—	7	—	—	8	2	—	9	4	—	—	8
9	—	7	3	—	8	5 2	—	9	8	—	—	1
30	—	7	6	—	8	9	—	10	—	—	12	6
1	—	7	9	—	9	—	2	10	4	—	—	11
2	—	8	—	—	9	4	—	10	8	—	—	4
3	—	8	3	—	9	7 2	—	11	—	—	13	9
4	—	8	6	—	9	11	—	11	4	—	—	2
5	—	8	9	—	10	2 2	—	11	8	—	—	7
6	—	9	—	—	10	6	—	12	—	—	15	—
7	—	9	3	—	10	9 2	—	12	4	—	—	5
8	—	9	6	—	11	1	—	12	8	—	—	10
9	—	9	9	—	11	4 2	—	13	—	—	16	3
40	—	10	—	—	11	8	—	13	4	—	—	8
1	—	10	3	—	11	11 2	—	13	8	—	—	1
2	—	10	6	—	12	3	—	14	—	—	17	6
3	—	10	9	—	12	6 2	—	14	4	—	—	11
4	—	11	—	—	12	10	—	14	8	—	—	4
5	—	11	3	—	13	1 2	—	15	—	—	18	9
6	—	11	6	—	13	5	—	15	4	—	—	2
7	—	11	9	—	13	8 2	—	15	8	—	—	7
8	—	12	—	—	14	—	—	16	—	—	—	—
9	—	12	3	—	14	3 2	—	16	4	—	—	5
50	—	12	6	—	14	7	—	16	8	—	—	10
1	—	12	9	—	14	10 2	—	17	—	—	1	3
2	—	13	—	—	15	2	—	17	4	—	—	8
3	—	13	3	—	15	5 2	—	17	8	—	—	1
4	—	13	6	—	15	9	—	18	—	—	1	6
5	—	13	9	—	16	—	2	18	4	—	1	11

FIVE MONTHS.

431

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.					
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.			
56	—	14	—	—	16	4	—	—	18	8	—	1	3	4	—
7	—	14	3	—	16	7	2	—	19	—	—	1	3	9	—
8	—	14	6	—	16	11	—	—	19	4	—	1	4	2	—
9	—	14	9	—	17	2	2	—	19	8	—	1	4	7	—
60	—	15	—	—	17	6	—	1	—	—	—	1	5	—	—
1	—	15	3	—	17	9	2	1	—	4	—	1	5	5	—
2	—	15	6	—	18	1	—	1	—	8	—	1	5	10	—
3	—	15	9	—	18	4	2	1	1	—	—	1	6	3	—
4	—	16	—	—	18	8	+	1	1	4	—	1	6	8	—
5	—	16	3	—	18	11	2	1	1	8	—	1	7	1	—
6	—	16	6	—	19	3	—	1	2	—	—	1	7	6	—
7	—	16	9	—	19	6	2	1	2	4	—	1	7	11	—
8	—	17	—	—	19	10	—	1	2	8	—	1	8	4	—
9	—	17	3	—	1	—	1	2	3	—	—	1	8	9	—
70	—	17	6	—	1	—	5	1	3	4	—	1	9	2	—
1	—	17	9	—	1	—	8	1	3	8	—	1	9	7	—
2	—	18	—	—	1	1	—	1	4	—	—	1	10	—	—
3	—	18	3	—	1	1	3	1	4	4	—	1	10	5	—
4	—	18	6	—	1	1	7	—	1	4	8	1	10	10	—
5	—	18	9	—	1	1	10	2	1	5	—	1	11	3	—
6	—	19	—	—	1	2	2	—	1	5	4	1	11	8	—
7	—	19	3	—	1	2	5	2	1	5	8	1	12	1	—
8	—	19	6	—	1	2	9	—	1	6	—	1	12	6	—
9	—	19	9	—	1	3	—	2	1	6	4	1	12	11	—
80	1	—	—	—	1	3	4	—	1	6	8	1	13	4	—
1	1	—	3	—	1	3	7	2	1	7	—	1	13	9	—
2	1	—	6	—	1	3	11	—	1	7	4	1	14	2	—
3	1	—	9	—	1	4	2	2	1	7	8	1	14	7	—
4	1	1	—	—	1	4	6	—	1	8	—	1	15	—	—
5	1	1	3	—	1	4	9	2	1	8	4	1	15	5	—
6	1	1	6	—	1	5	1	—	1	8	8	1	15	10	—
7	1	1	9	—	1	5	4	2	1	9	—	1	16	3	—
8	1	2	—	—	1	5	8	—	1	9	4	1	16	8	—
9	1	2	3	—	1	5	11	2	1	9	8	1	17	1	—
90	1	2	6	—	1	6	3	—	1	10	—	1	17	6	—
1	1	2	9	—	1	6	6	2	1	10	4	1	17	11	—
2	1	3	—	—	1	6	10	—	1	10	8	1	18	4	—
3	1	3	3	—	1	7	1	2	1	11	—	1	18	9	—
4	1	3	6	—	1	7	5	—	1	11	4	1	19	2	—
5	1	3	9	—	1	7	8	2	1	11	8	1	19	7	—
6	1	4	—	—	1	8	—	—	1	12	—	2	—	—	—
7	1	4	3	—	1	8	3	2	1	12	4	2	—	5	—
8	1	4	6	—	1	8	7	—	1	12	8	2	—	10	—
9	1	4	9	—	1	8	10	2	1	13	—	2	1	3	—
100	1	5	—	—	1	9	2	—	1	13	4	2	1	8	—
200	2	10	—	—	2	18	4	—	3	6	8	4	3	4	—
300	3	15	—	—	4	7	6	—	5	—	—	6	5	—	—
400	5	—	—	—	5	16	8	—	6	13	4	8	6	8	—
500	6	5	—	—	7	5	10	—	8	6	8	10	8	4	—
600	7	10	—	—	8	15	—	—	10	—	—	12	10	—	—
700	8	15	—	—	10	4	2	—	11	13	4	14	11	8	—
800	10	—	—	—	11	13	4	—	13	6	8	16	13	4	—
900	11	5	—	—	13	2	6	—	15	—	—	18	15	—	—
1000	12	10	—	—	14	11	8	—	16	13	4	20	16	8	—
2000	25	—	—	—	29	3	4	—	33	6	8	41	13	4	—

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	3 3	—	—	4 1	—	—	4 3	—	—	6 —
2	—	—	7 1	—	—	8 2	—	—	9 3	—	1 —	—
3	—	—	10 3	—	1 —	2 —	—	1 —	2 2	—	1 —	6 —
4	—	1 —	2 2	—	1 —	4 3	—	1 —	7 1	—	2 —	—
5	—	1 —	6 —	—	1 —	9 —	—	2 —	—	—	2 —	6 —
6	—	1 —	9 3	—	2 —	1 1	—	2 —	4 3	—	3 —	—
7	—	2 —	1 1	—	2 —	5 2	—	2 —	9 3	—	3 —	6 —
8	—	2 —	4 3	—	2 —	9 2	—	3 —	2 2	—	4 —	—
9	—	2 —	8 2	—	3 —	1 3	—	3 —	7 1	—	4 —	6 —
10	—	3 —	—	—	3 —	6 —	—	4 —	—	—	5 —	—
11	—	3 —	3 3	—	3 —	10 1	—	4 —	4 3	—	5 —	6 —
12	—	3 —	7 1	—	4 —	2 2	—	4 —	9 3	—	6 —	—
13	—	3 —	10 3	—	4 —	6 2	—	5 —	2 2	—	6 —	6 —
14	—	4 —	2 2	—	4 —	10 3	—	5 —	7 1	—	7 —	—
15	—	4 —	6 —	—	5 —	3 —	—	6 —	—	—	7 —	6 —
16	—	4 —	9 3	—	5 —	7 1	—	6 —	4 3	—	8 —	—
17	—	5 —	1 1	—	5 —	11 2	—	6 —	9 3	—	8 —	6 —
18	—	5 —	4 3	—	6 —	3 2	—	7 —	2 2	—	9 —	—
19	—	5 —	8 2	—	6 —	7 3	—	7 —	7 1	—	9 —	6 —
20	—	6 —	—	—	7 —	—	—	8 —	—	—	10 —	—
1	—	6 —	3 3	—	7 —	4 1	—	8 —	4 3	—	10 —	6 —
2	—	6 —	7 1	—	7 —	8 2	—	8 —	9 3	—	11 —	—
3	—	6 —	10 3	—	8 —	—	2 —	9 —	2 2	—	11 —	6 —
4	—	7 —	2 2	—	8 —	4 3	—	9 —	7 1	—	12 —	—
5	—	7 —	6 —	—	8 —	9 —	—	10 —	—	—	12 —	6 —
6	—	7 —	9 3	—	9 —	1 1	—	10 —	4 3	—	13 —	—
7	—	8 —	1 1	—	9 —	5 2	—	10 —	9 3	—	13 —	6 —
8	—	8 —	4 3	—	9 —	9 2	—	11 —	2 2	—	14 —	—
9	—	8 —	8 2	—	10 —	1 3	—	11 —	7 1	—	14 —	6 —
30	—	9 —	—	—	10 —	6 —	—	12 —	—	—	15 —	—
1	—	9 —	3 3	—	10 —	10 1	—	12 —	4 3	—	15 —	6 —
2	—	9 —	7 1	—	11 —	2 2	—	12 —	9 3	—	16 —	—
3	—	9 —	10 3	—	11 —	6 2	—	13 —	2 2	—	16 —	6 —
4	—	10 —	2 2	—	11 —	10 3	—	13 —	7 1	—	17 —	—
5	—	10 —	6 —	—	12 —	3 —	—	14 —	—	—	17 —	6 —
6	—	10 —	9 3	—	12 —	7 1	—	14 —	4 3	—	18 —	—
7	—	11 —	1 1	—	12 —	11 2	—	14 —	9 3	—	18 —	6 —
8	—	11 —	4 3	—	13 —	3 2	—	15 —	2 2	—	19 —	—
9	—	11 —	8 2	—	13 —	7 3	—	15 —	7 1	—	19 —	6 —
40	—	12 —	—	—	14 —	—	—	16 —	—	—	—	—
1	—	12 —	3 3	—	14 —	4 1	—	16 —	4 3	—	—	6 —
2	—	12 —	7 1	—	14 —	8 2	—	16 —	9 3	—	1 —	—
3	—	12 —	10 3	—	15 —	—	2 —	17 —	2 2	—	1 —	6 —
4	—	13 —	2 2	—	15 —	4 3	—	17 —	7 1	—	1 —	—
5	—	13 —	6 —	—	15 —	9 —	—	18 —	—	—	1 —	6 —
6	—	13 —	9 3	—	16 —	1 1	—	18 —	4 3	—	1 —	—
7	—	14 —	1 1	—	16 —	5 2	—	18 —	9 3	—	1 —	6 —
8	—	14 —	4 3	—	16 —	9 2	—	19 —	2 2	—	1 —	—
9	—	14 —	8 2	—	17 —	1 3	—	19 —	7 1	—	1 —	6 —
50	—	15 —	—	—	17 —	6 —	—	—	—	—	1 —	—
1	—	15 —	3 3	—	17 —	10 1	—	1 —	4 3	—	1 —	6 —
2	—	15 —	7 1	—	18 —	2 2	—	1 —	9 3	—	1 —	—
3	—	15 —	10 3	—	18 —	6 2	—	1 —	1 2 2	—	1 —	6 —
4	—	16 —	2 2	—	18 —	10 3	—	1 —	1 7 1	—	1 —	—
5	—	16 —	6 —	—	19 —	3 —	—	1 —	2 —	—	1 —	6 —

L. at

56
7
8
9
60
1
2
3
4
5
6
7
8
9
70
1
2
3
4
5
6
7
8
9
80
1
2
3
4
5
6
7
8
9
90
1
2
3
4
5
6
7
8
9
100
200
300
400
500
600
700
800
900
1000
2000

SIX MONTHS.

433

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	16	9 3	—	19	7 1	1	2	4 3	1	8	—
7	—	17	1 1	—	19	11 2	1	2	9 3	1	8	6
8	—	17	4 3	1	—	3 2	1	3	2 2	1	9	—
9	—	17	8 2	1	—	7 3	1	3	7 1	1	9	6
60	—	18	—	1	1	—	1	4	—	1	10	—
1	—	18	3 3	1	1	4 1	1	4	4 3	1	10	6
2	—	18	7 1	1	1	8 2	1	4	9 3	1	11	—
3	—	18	10 3	1	2	— 2	1	5	2 2	1	11	6
4	—	19	2 2	1	2	4 3	1	5	7 1	1	12	—
5	—	19	6 —	1	2	9 —	1	6	—	1	12	6
6	—	19	9 3	1	3	1 1	1	6	4 3	1	13	—
7	1	—	1 1	1	3	5 2	1	6	9 3	1	13	6
8	1	—	4 3	1	3	9 2	1	7	2 2	1	14	—
9	1	—	8 2	1	4	1 3	1	7	7 1	1	14	6
70	1	1	—	1	4	6 —	1	8	—	1	15	—
1	1	1	3 3	1	4	10 1	1	8	4 3	1	15	6
2	1	1	7 1	1	5	2 2	1	8	9 3	1	16	—
3	1	1	10 3	1	5	6 2	1	9	2 2	1	16	6
4	1	2	2 2	1	5	10 3	1	9	7 1	1	17	—
5	1	2	6 —	1	6	3 —	1	10	—	1	17	6
6	1	2	9 3	1	6	7 1	1	10	4 3	1	18	—
7	1	3	1 1	1	6	11 2	1	10	9 3	1	18	6
8	1	3	4 3	1	7	3 2	1	11	2 2	1	19	—
9	1	3	8 2	1	7	7 3	1	11	7 1	1	19	6
80	1	4	—	1	8	—	1	12	—	2	—	—
1	1	4	3 3	1	8	4 1	1	12	4 3	2	—	6
2	1	4	7 1	1	8	8 2	1	12	9 3	2	1	—
3	1	4	10 3	1	9	— 2	1	13	2 2	2	1	6
4	1	5	2 2	1	9	4 3	1	13	7 1	2	2	—
5	1	5	6 —	1	9	9 —	1	14	—	2	2	6
6	1	5	9 3	1	10	1 1	1	14	4 3	2	3	—
7	1	6	1 1	1	10	5 2	1	14	9 3	2	3	6
8	1	6	4 3	1	10	9 2	1	15	2 2	2	4	—
9	1	6	8 2	1	11	1 3	1	15	7 1	2	4	6
90	1	7	—	1	11	6 —	1	16	—	2	5	—
1	1	7	3 3	1	11	10 1	1	16	4 3	2	5	6
2	1	7	7 1	1	12	2 2	1	16	9 3	2	6	—
3	1	7	10 3	1	12	6 2	1	17	2 2	2	6	6
4	1	8	2 2	1	12	10 3	1	17	7 1	2	7	—
5	1	8	6 —	1	13	3 —	1	18	—	2	7	6
6	1	8	9 3	1	13	7 1	1	18	4 3	2	8	—
7	1	9	1 1	1	13	11 2	1	18	9 3	2	8	6
8	1	9	4 3	1	14	3 2	1	19	2 2	2	9	—
9	1	9	8 2	1	14	7 3	1	19	7 1	2	9	6
100	1	10	—	1	15	—	2	—	—	2	10	—
200	3	—	—	3	10	—	4	—	—	5	—	—
300	4	10	—	5	5	—	6	—	—	7	10	—
400	6	—	—	7	—	—	8	—	—	10	—	—
500	7	10	—	7	15	—	10	—	—	12	10	—
600	9	—	—	10	10	—	12	—	—	15	—	—
700	10	10	—	12	5	—	14	—	—	17	10	—
800	12	—	—	14	—	—	16	—	—	20	—	—
900	13	10	—	15	15	—	18	—	—	22	10	—
1000	15	—	—	17	10	—	20	—	—	25	—	—
2000	30	—	—	35	—	—	40	—	—	50	—	—

L.at	3 per Cent.			3½ p. Cent.			4 per Cent.			5 per Cent.			L.at
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	
1	—	—	4 1	—	—	5 —	—	—	5 3	—	—	7 —	56
2	—	—	8 2	—	—	9 3	—	—	11 1	—	1	2 —	7
3	—	1	— 2	—	1	2 3	—	1	4 3	—	1	9 —	8
4	—	1	4 3	—	1	7 2	—	1	10 2	—	2	4 —	9
5	—	1	9 —	—	2	— 2	—	2	4 —	—	2	11 —	60
6	—	2	1 1	—	2	5 2	—	2	9 3	—	3	6 —	1
7	—	2	5 2	—	2	10 1	—	3	3 1	—	4	1 —	2
8	—	2	9 2	—	3	3 1	—	3	8 3	—	4	8 —	3
9	—	3	1 3	—	3	8 —	—	4	2 2	—	5	3 —	4
10	—	3	6 —	—	4	1 —	—	4	8 —	—	5	10 —	5
11	—	3	10 1	—	4	6 —	—	5	1 3	—	6	5 —	6
12	—	4	2 2	—	4	10 3	—	5	7 1	—	7	—	7
13	—	4	6 2	—	5	3 2	—	6	— 3	—	7	7 —	8
14	—	4	10 3	—	5	8 2	—	6	6 2	—	8	2 —	9
15	—	5	3 —	—	6	1 2	—	7	—	—	8	9 —	70
16	—	5	7 1	—	6	6 1	—	7	5 3	—	9	4 —	1
17	—	5	11 2	—	6	11 1	—	7	11 1	—	9	11 —	2
18	—	6	3 2	—	7	4 —	—	8	4 3	—	10	6 —	3
19	—	6	7 3	—	7	9 —	—	8	10 2	—	11	1 —	4
20	—	7	—	—	8	2 —	—	9	4 —	—	11	8 —	5
1	—	7	4 1	—	8	7 —	—	9	9 3	—	12	3 —	6
2	—	7	8 2	—	8	11 3	—	10	3 1	—	12	10 —	7
3	—	8	— 2	—	9	4 3	—	10	8 3	—	13	5 —	8
4	—	8	4 3	—	9	9 2	—	11	2 2	—	14	—	9
5	—	8	9 —	—	10	2 2	—	11	8 —	—	14	7 —	30
6	—	9	1 1	—	10	7 2	—	12	1 3	—	15	2 —	1
7	—	9	5 2	—	11	— 1	—	12	7 1	—	15	9 —	2
8	—	9	9 2	—	11	5 —	—	13	— 3	—	16	4 —	3
9	—	10	1 3	—	11	10 —	—	13	6 2	—	16	11 —	4
30	—	10	6 —	—	12	3 —	—	14	—	—	17	6 —	5
1	—	10	10 1	—	12	8 —	—	14	5 3	—	18	1 —	6
2	—	11	2 2	—	13	— 3	—	14	11 1	—	1	8 —	7
3	—	11	6 2	—	13	5 3	—	15	4 3	—	18	3 —	8
4	—	11	10 3	—	13	10 2	—	15	10 2	—	19	10 —	9
5	—	12	3 —	—	14	3 2	—	16	4 —	—	1	5 —	10
6	—	12	7 1	—	14	8 2	—	16	9 3	—	1	1 —	11
7	—	12	11 2	—	15	1 1	—	17	3 1	—	1	1 7 —	12
8	—	13	3 2	—	15	6 1	—	17	8 3	—	1	2 2 —	13
9	—	13	7 3	—	15	11 —	—	18	2 2	—	1	2 9 —	14
40	—	14	—	—	16	4 —	—	18	8 —	—	1	3 4 —	15
1	—	14	4 1	—	16	9 —	—	19	1 3	—	1	3 11 —	16
2	—	14	8 2	—	17	1 3	—	19	7 1	—	1	4 6 —	17
3	—	15	— 2	—	17	6 3	—	1	— 3	—	1	5 1 —	18
4	—	15	4 3	—	17	11 2	—	1	6 2	—	1	5 8 —	19
5	—	15	9 —	—	18	4 2	—	1	1 —	—	1	6 3 —	20
6	—	16	1 1	—	18	9 2	—	1	1 5 3	—	1	6 10 —	21
7	—	16	5 2	—	19	2 1	—	1	1 11 1	—	1	7 5 —	22
8	—	16	9 2	—	19	7 1	—	1	2 4 3	—	1	8 —	23
9	—	17	1 3	—	1	—	—	1	2 10 2	—	1	8 7 —	24
50	—	17	6 —	—	1	5 —	—	1	3 4 —	—	1	9 2 —	25
1	—	17	10 1	—	1	10 —	—	1	3 9 3	—	1	9 9 —	26
2	—	18	2 2	—	1	1 2 3	—	1	4 3 1	—	1	10 4 —	27
3	—	18	6 2	—	1	7 3	—	1	4 8 3	—	1	10 11 —	28
4	—	18	10 3	—	1	2 — 2	—	1	5 2 2	—	1	11 6 —	29
5	—	19	3 —	—	1	2 5 2	—	1	5 8 —	—	1	12 1 —	30

SEVEN MONTHS.

435

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	—	19	7 1	1	2	10 2	1	6	1 3	1	12	8 —
7	—	19	11 2	1	3	3 1	1	6	7 1	1	13	3 —
8	1	—	3 2	1	3	8 1	1	7	— 3	1	13	10 —
9	1	—	7 3	1	4	1 —	1	7	6 2	1	14	5 —
60	1	1	— —	1	4	6 —	1	8	— —	1	15	— —
1	1	1	4 1	1	4	11 —	1	8	5 3	1	15	7 —
2	1	1	8 2	1	5	3 3	1	8	11 1	1	16	2 —
3	1	2	— 2	1	5	8 3	1	9	4 3	1	16	9 —
4	1	2	4 3	1	6	1 2	1	9	10 2	1	17	4 —
5	1	2	9 —	1	6	6 2	1	10	4 —	1	17	11 —
6	1	3	1 1	1	6	11 2	1	10	9 3	1	18	6 —
7	1	3	5 2	1	7	4 1	1	11	3 1	1	19	1 —
8	1	3	9 2	1	7	9 1	1	11	8 3	1	19	8 —
9	1	4	1 3	1	8	2 —	1	12	2 2	2	—	3 —
70	1	4	6 —	1	8	7 —	1	12	8 —	2	—	10 —
1	1	4	10 1	1	9	— —	1	13	1 3	2	1	5 —
2	1	5	2 2	1	9	4 3	1	13	7 1	2	2	— —
3	1	5	6 2	1	9	9 3	1	14	— 3	2	2	7 —
4	1	5	10 3	1	10	2 2	1	14	6 2	2	3	2 —
5	1	6	3 —	1	10	7 2	1	15	— —	2	3	9 —
6	1	6	7 1	1	11	— 2	1	15	5 3	2	4	4 —
7	1	6	11 2	1	11	5 1	1	15	11 1	2	4	11 —
8	1	7	3 2	1	11	10 1	1	16	4 3	2	5	6 —
9	1	7	7 3	1	12	3 —	1	16	10 2	2	6	1 —
80	1	8	— —	1	12	8 —	1	17	4 —	2	6	8 —
1	1	8	4 1	1	13	1 —	1	17	9 3	2	7	3 —
2	1	8	8 2	1	13	5 3	1	18	3 1	2	7	10 —
3	1	9	— 2	1	13	10 3	1	18	8 3	2	8	5 —
4	1	9	4 3	1	14	3 2	1	19	2 2	2	9	— —
5	1	9	9 —	1	14	8 2	1	19	8 —	2	9	7 —
6	1	10	1 1	1	15	1 2	2	—	1 3	2	10	2 —
7	1	10	5 2	1	15	6 1	2	—	7 1	2	10	9 —
8	1	10	9 2	1	15	11 1	2	1	— 3	2	11	4 —
9	1	11	1 3	1	16	4 —	2	1	6 2	2	11	11 —
90	1	11	6 —	1	16	9 —	2	2	— —	2	12	6 —
1	1	11	10 1	1	17	2 —	2	2	5 3	2	13	1 —
2	1	12	2 2	1	17	6 3	2	2	11 1	2	13	8 —
3	1	12	6 2	1	17	11 3	2	3	4 3	2	14	3 —
4	1	12	10 3	1	18	4 2	2	3	10 2	2	14	10 —
5	1	13	3 —	1	18	9 2	2	4	4 —	2	15	5 —
6	1	13	7 1	1	19	2 2	2	4	9 3	2	16	— —
7	1	13	11 2	1	19	7 1	2	5	3 1	2	16	7 —
8	1	14	3 2	2	—	1 —	2	5	8 3	2	17	2 —
9	1	14	7 3	2	—	5 —	2	6	2 2	2	17	9 —
100	1	15	— —	2	—	10 —	2	6	8 —	2	18	4 —
200	3	10	— —	4	1	8 —	4	13	4 —	5	16	8 —
300	5	5	— —	6	2	6 —	7	—	— —	8	15	— —
400	7	—	— —	8	3	4 —	9	6	8 —	11	13	4 —
500	8	15	— —	10	4	2 —	11	13	4 —	14	11	8 —
600	10	10	— —	12	5	— —	14	—	— —	17	10	— —
700	12	5	— —	14	5	10 —	16	6	8 —	20	8	4 —
800	14	—	— —	16	6	8 —	18	13	4 —	23	6	8 —
900	15	15	— —	18	7	6 —	21	—	— —	26	5	— —
1000	17	10	— —	20	8	4 —	23	6	8 —	29	3	4 —
2000	53	—	— —	40	16	8 —	46	13	4 —	58	6	8 —

L. at	3 per Cent.			3 $\frac{1}{2}$ per Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	5	—	—	5	—	—	6	—	—	8
2	—	—	9	—	—	11	—	—	1	—	—	4
3	—	1	2	—	1	4	—	1	7	—	2	—
4	—	1	7	—	1	10	—	2	1	—	2	8
5	—	2	—	—	2	4	—	2	8	—	3	4
6	—	2	5	—	2	9	—	3	2	—	4	—
7	—	2	9	—	3	3	—	3	8	—	4	8
8	—	3	2	—	3	8	—	4	3	—	5	4
9	—	3	7	—	4	2	—	4	9	—	6	—
10	—	4	—	—	4	8	—	5	4	—	6	8
11	—	4	5	—	5	1	—	5	10	—	7	4
12	—	4	9	—	5	7	—	6	4	—	8	—
13	—	5	2	—	6	—	—	6	11	—	8	8
14	—	5	7	—	6	6	—	7	5	—	9	4
15	—	6	—	—	7	—	—	8	—	—	10	—
16	—	6	5	—	7	5	—	8	6	—	10	8
17	—	6	9	—	7	11	—	9	—	—	11	4
18	—	7	2	—	8	4	—	9	7	—	12	—
19	—	7	7	—	8	10	—	10	1	—	12	8
20	—	8	—	—	9	4	—	10	8	—	13	4
1	—	8	5	—	9	9	—	11	2	—	14	—
2	—	8	9	—	10	3	—	11	8	—	14	8
3	—	9	2	—	10	8	—	12	3	—	15	4
4	—	9	7	—	11	2	—	12	9	—	16	—
5	—	10	—	—	11	8	—	13	4	—	16	8
6	—	10	5	—	12	1	—	13	10	—	17	4
7	—	10	9	—	12	7	—	14	4	—	18	—
8	—	11	2	—	13	—	—	14	11	—	18	8
9	—	11	7	—	13	6	—	15	5	—	19	4
30	—	12	—	—	14	—	—	16	—	—	—	—
1	—	12	5	—	14	5	—	16	6	—	—	8
2	—	12	9	—	14	11	—	17	—	—	1	4
3	—	13	2	—	15	4	—	17	7	—	1	2
4	—	13	7	—	15	10	—	18	1	—	1	2
5	—	14	—	—	16	4	—	18	8	—	1	3
6	—	14	5	—	16	9	—	19	2	—	1	4
7	—	14	9	—	17	3	—	19	8	—	1	4
8	—	15	2	—	17	8	—	—	3	—	1	5
9	—	15	7	—	18	2	—	—	9	—	1	6
40	—	16	—	—	18	8	—	—	1	—	1	6
1	—	16	5	—	19	1	—	—	10	—	1	7
2	—	16	9	—	19	7	—	—	2	—	1	8
3	—	17	2	—	—	3	—	—	2	—	1	8
4	—	17	7	—	—	6	—	—	3	—	1	9
5	—	18	—	—	—	1	—	—	4	—	—	10
6	—	18	5	—	—	5	—	—	4	—	—	10
7	—	18	9	—	—	11	—	—	5	—	—	11
8	—	19	2	—	—	4	—	—	5	—	—	12
9	—	19	7	—	—	10	—	—	6	—	—	12
50	—	—	—	—	—	3	—	—	6	—	—	13
1	—	—	5	—	—	3	—	—	7	—	—	14
2	—	—	9	—	—	3	—	—	7	—	—	14
3	—	—	2	—	—	4	—	—	8	—	—	15
4	—	—	7	—	—	5	—	—	8	—	—	16
5	—	—	—	—	—	5	—	—	9	—	—	16

L. at

56

7

8

9

60

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

EIGHT MONTHS.

437

L. at	3 per Cent.				3 1/2 per Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
56	1	2	5	-	1	6	1	3	1	9	10	1	1	17	4	-
7	1	2	9	3	1	6	7	1	1	10	4	3	1	18	-	-
8	1	3	2	2	1	7	-	3	1	10	11	1	1	18	8	-
9	1	3	7	1	1	7	6	2	1	11	5	2	1	19	4	-
60	1	4	-	-	1	8	-	-	1	12	-	-	2	-	-	-
1	1	4	5	-	1	8	5	3	1	12	6	1	2	-	8	-
2	1	4	9	3	1	8	11	1	1	13	-	3	2	1	4	-
3	1	5	2	2	1	9	4	3	1	13	7	1	2	2	-	-
4	1	5	7	1	1	9	10	2	1	14	1	2	2	2	8	-
5	1	6	-	-	1	10	4	-	1	14	8	-	2	3	4	-
6	1	6	5	-	1	10	9	3	1	15	2	1	2	4	-	-
7	1	6	9	3	1	11	3	1	1	15	8	3	2	4	8	-
8	1	7	2	2	1	11	8	3	1	16	3	1	2	5	4	-
9	1	7	7	1	1	12	2	2	1	16	9	2	2	6	-	-
70	1	8	-	-	1	12	8	-	1	17	4	-	2	6	8	-
1	1	8	5	-	1	13	1	3	1	17	10	1	2	7	4	-
2	1	8	9	3	1	13	7	1	1	18	4	3	2	8	-	-
3	1	9	2	2	1	14	-	3	1	18	11	1	2	8	8	-
4	1	9	7	1	1	14	6	2	1	19	5	2	2	9	4	-
5	1	10	-	-	1	15	-	-	2	-	-	-	2	10	-	-
6	1	10	5	-	1	15	5	3	2	-	6	1	2	10	8	-
7	1	10	9	3	1	15	11	1	2	1	-	3	2	11	4	-
8	1	11	2	2	1	16	4	3	2	1	7	1	2	12	-	-
9	1	11	7	1	1	16	10	2	2	2	1	2	2	12	8	-
80	1	12	-	-	1	17	4	-	2	2	8	-	2	13	4	-
1	1	12	5	-	1	17	9	3	2	3	2	1	2	14	-	-
2	1	12	9	3	1	18	3	1	2	3	8	3	2	14	8	-
3	1	13	2	2	1	18	8	3	2	4	3	1	2	15	4	-
4	1	13	7	1	1	19	2	2	2	4	9	2	2	16	-	-
5	1	14	-	-	1	19	8	-	2	5	4	-	2	16	8	-
6	1	14	5	-	2	-	1	3	2	5	10	1	2	17	4	-
7	1	14	9	3	2	-	7	1	2	6	4	3	2	18	-	-
8	1	15	2	2	2	1	-	3	2	6	11	1	2	18	8	-
9	1	15	7	1	2	1	6	2	2	7	5	2	2	19	4	-
90	1	16	-	-	2	2	-	-	2	8	-	-	3	-	-	-
1	1	16	5	-	2	2	5	3	2	8	6	1	3	-	8	-
2	1	16	9	3	2	2	11	1	2	9	-	3	3	1	4	-
3	1	17	2	2	2	3	4	3	2	9	7	1	3	2	-	-
4	1	17	7	1	2	3	10	2	2	10	1	2	3	2	8	-
5	1	18	-	-	2	4	4	-	2	10	8	-	3	3	4	-
6	1	18	5	-	2	4	9	3	2	11	2	1	3	4	-	-
7	1	18	9	3	2	5	3	1	2	11	8	3	3	4	8	-
8	1	19	2	2	2	5	8	3	2	12	3	1	3	5	4	-
9	1	19	7	1	2	6	2	2	2	12	9	2	3	6	-	-
100	2	-	-	-	2	6	8	-	2	13	4	-	3	6	8	-
200	4	-	-	-	4	13	4	-	5	6	8	-	6	13	4	-
300	6	-	-	-	7	-	-	-	8	-	-	-	10	-	-	-
400	8	-	-	-	9	6	8	-	10	13	4	-	13	6	8	-
500	10	-	-	-	11	13	4	-	13	6	8	-	16	13	4	-
600	12	-	-	-	14	-	-	-	16	-	-	-	20	-	-	-
700	14	-	-	-	16	6	8	-	18	13	4	-	23	6	8	-
800	16	-	-	-	18	13	4	-	21	6	8	-	26	13	4	-
900	18	-	-	-	21	-	-	-	24	-	-	-	30	-	-	-
1000	20	-	-	-	23	6	8	-	26	13	4	-	33	6	8	-
2000	40	-	-	-	46	13	4	-	53	6	8	-	66	13	4	-

L. at 1	7 per Cent.			3 1/2 per Cent.	4 per Cent.			5 per Cent.
	l.	s.	d. f.		l.	s.	d. f.	
1	—	—	5 2	—	—	—	7 1	—
2	—	—	10 3	—	1	—	2 2	—
3	—	1	4 1	—	1	7	—	—
4	—	1	9 3	—	2	1 1	—	—
5	—	2	3 —	—	2	7 2	—	—
6	—	2	8 2	—	3	1 3	—	—
7	—	3	1 3	—	3	8 —	—	—
8	—	3	7 1	—	4	2 2	—	—
9	—	4	— 3	—	4	8 3	—	—
10	—	4	6 —	—	5	3 —	—	—
11	—	4	11 2	—	5	9 1	—	—
12	—	5	4 3	—	6	3 2	—	—
13	—	5	10 1	—	6	10 —	—	—
14	—	6	3 3	—	7	4 1	—	—
15	—	6	9 —	—	7	10 2	—	—
16	—	7	2 2	—	8	4 3	—	—
17	—	7	7 3	—	8	11 —	—	—
18	—	8	1 1	—	9	5 2	—	—
19	—	8	6 3	—	9	11 3	—	—
20	—	9	—	—	10	6 —	—	—
1	—	9	5 2	—	11	— 1	—	—
2	—	9	10 3	—	11	6 2	—	—
3	—	10	4 1	—	12	1 —	—	—
4	—	10	9 3	—	12	7 1	—	—
5	—	11	3 —	—	13	1 2	—	—
6	—	11	8 2	—	13	7 3	—	—
7	—	12	1 3	—	14	2 —	—	—
8	—	12	7 1	—	14	8 2	—	—
9	—	13	— 3	—	15	2 3	—	—
10	—	13	6 —	—	15	9 —	—	—
1	—	13	11 2	—	16	3 1	—	—
2	—	14	4 3	—	16	9 2	—	—
3	—	14	10 1	—	17	4 —	—	—
4	—	15	3 3	—	17	10 1	—	—
5	—	15	9 —	—	18	4 2	—	—
6	—	16	2 2	—	18	10 3	—	—
7	—	16	7 3	—	19	5 —	—	—
8	—	17	1 1	—	19	11 2	—	—
9	—	17	6 3	—	—	5 3	—	—
10	—	18	—	—	—	1 —	—	—
1	—	18	5 2	—	—	6 1	—	—
2	—	18	10 3	—	—	2 —	—	—
3	—	19	4 1	—	—	7 —	—	—
4	—	19	9 3	—	—	1 1	—	—
5	—	—	3 —	—	—	3 7 2	—	—
6	—	—	8 2	—	—	4 1 3	—	—
7	—	1	1 3	—	—	4 8 —	—	—
8	—	1	7 1	—	—	5 2 2	—	—
9	—	1	2 — 3	—	—	5 8 3	—	—
10	—	1	2 6 —	—	—	6 3 —	—	—
1	—	1	2 11 2	—	—	6 9 1	—	—
2	—	1	3 4 3	—	—	7 3 2	—	—
3	—	1	3 10 1	—	—	7 10 —	—	—
4	—	1	4 3 3	—	—	8 4 1	—	—
5	—	1	4 9 —	—	—	8 10 2	—	—

NINE MONTHS.

439

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	1	5	2 2	1	9	4 3	1	13	7 1	2	2	—
7	1	5	7 3	1	9	11 —	1	14	2 2	2	2	9 —
8	1	6	1 1	1	10	5 2	1	14	9 3	2	3	6 —
9	1	6	6 3	1	10	11 3	1	15	5 —	2	4	3 —
60	1	7	—	1	11	6 —	1	16	—	2	5	—
1	1	7	5 2	1	12	— 1	1	16	7 1	2	5	9 —
2	1	7	10 3	1	12	6 2	1	17	2 2	2	6	6 —
3	1	8	4 1	1	13	1 —	1	17	9 3	2	7	3 —
4	1	8	9 3	1	13	7 1	1	18	5 —	2	8	—
5	1	9	3 —	1	14	1 2	1	19	—	2	8	9 —
6	1	9	8 2	1	14	7 3	1	19	7 1	2	9	6 —
7	1	10	1 3	1	15	2 —	2	—	2 2	2	10	3 —
8	1	10	7 1	1	15	8 2	2	—	9 3	2	11	—
9	1	11	— 3	1	16	2 3	2	1	5 —	2	11	9 —
70	1	11	6 —	1	16	9 —	2	2	—	2	12	6 —
1	1	11	11 2	1	17	3 1	2	2	7 1	2	13	3 —
2	1	12	4 3	1	17	9 2	2	3	2 2	2	14	—
3	1	12	10 1	1	18	4 —	2	3	9 3	2	14	9 —
4	1	13	3 3	1	18	10 1	2	4	5 —	2	15	6 —
5	1	13	9 —	1	19	4 2	2	5	—	2	16	3 —
6	1	14	2 2	1	19	10 3	2	5	7 1	2	17	—
7	1	14	7 3	2	—	5 —	2	6	2 2	2	17	9 —
8	1	15	1 1	2	—	11 2	2	6	9 3	2	18	6 —
9	1	15	6 3	2	1	5 3	2	7	5 —	2	19	3 —
80	1	16	—	2	2	—	2	8	—	3	—	—
1	1	16	5 2	2	2	6 1	2	8	7 1	3	—	9 —
2	1	16	10 3	2	3	— 2	2	9	2 2	3	1	6 —
3	1	17	4 1	2	3	7 —	2	9	9 3	3	2	3 —
4	1	17	9 3	2	4	1 1	2	10	5 —	3	3	—
5	1	18	3 —	2	4	7 2	2	11	—	3	3	9 —
6	1	18	8 2	2	5	1 3	2	11	7 1	3	4	6 —
7	1	19	1 3	2	5	8 —	2	12	2 2	3	5	3 —
8	1	19	7 1	2	6	2 2	2	12	9 3	3	6	—
9	2	—	3	2	6	8 3	2	13	5 —	3	6	9 —
90	2	—	6 —	2	7	3 —	2	14	—	3	7	6 —
1	2	—	11 2	2	7	9 1	2	14	7 1	3	8	3 —
2	2	1	4 3	2	8	3 2	2	15	2 2	3	9	—
3	2	1	10 1	2	8	10 —	2	15	9 3	3	9	9 —
4	2	2	3 3	2	9	4 1	2	16	5 —	3	10	6 —
5	2	2	9 —	2	9	10 2	2	17	—	3	11	3 —
6	2	3	2 2	2	10	4 3	2	17	7 1	3	12	—
7	2	3	7 3	2	10	11 —	2	18	2 2	3	12	9 —
8	2	4	1 1	2	11	5 2	2	18	9 3	3	13	6 —
9	2	4	6 3	2	11	11 3	2	19	5 —	3	14	3 —
100	2	5	—	2	12	6 —	3	—	—	3	15	—
200	4	10	—	5	5	—	6	—	—	7	10	—
300	6	15	—	7	17	6 —	9	—	—	11	5	—
400	9	—	—	10	10	—	12	—	—	15	—	—
500	11	5	—	13	2	6 —	15	—	—	18	15	—
600	13	10	—	15	15	—	18	—	—	22	10	—
700	15	15	—	18	7	6 —	21	—	—	26	5	—
800	18	—	—	21	—	—	24	—	—	30	—	—
900	20	5	—	23	12	6 —	27	—	—	33	15	—
1000	22	10	—	26	5	—	30	—	—	37	10	—
2000	45	—	—	52	10	—	60	—	—	75	—	—

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
1	—	—	6	—	—	7	—	—	8	—	—	10
2	—	1	—	—	1	2	—	1	4	—	1	8
3	—	1	6	—	1	9	—	2	—	—	2	6
4	—	2	—	—	2	4	—	2	8	—	3	4
5	—	2	6	—	2	11	—	3	4	—	4	2
6	—	3	—	—	3	6	—	4	—	—	5	—
7	—	3	6	—	4	1	—	4	8	—	5	10
8	—	4	—	—	4	8	—	5	4	—	6	8
9	—	4	6	—	5	3	—	6	—	—	7	6
10	—	5	—	—	5	10	—	6	8	—	8	4
11	—	5	6	—	6	5	—	7	4	—	9	2
12	—	6	—	—	7	—	—	8	—	—	10	—
13	—	6	6	—	7	7	—	8	8	—	10	10
14	—	7	—	—	8	2	—	9	4	—	11	8
15	—	7	6	—	8	9	—	10	—	—	12	6
16	—	8	—	—	9	4	—	10	8	—	13	4
17	—	8	6	—	9	11	—	11	4	—	14	2
18	—	9	—	—	10	6	—	12	—	—	15	—
19	—	9	6	—	11	1	—	12	8	—	15	10
20	—	10	—	—	11	8	—	13	4	—	16	8
1	—	10	6	—	12	3	—	14	—	—	17	6
2	—	11	—	—	12	10	—	14	8	—	18	4
3	—	11	6	—	13	5	—	15	4	—	19	2
4	—	12	—	—	14	—	—	16	—	—	1	—
5	—	12	6	—	14	7	—	16	8	—	1	10
6	—	13	—	—	15	2	—	17	4	—	1	8
7	—	13	6	—	15	9	—	18	—	—	1	6
8	—	14	—	—	16	4	—	18	8	—	1	4
9	—	14	6	—	16	11	—	19	4	—	1	2
30	—	15	—	—	17	6	—	1	—	—	1	5
1	—	15	6	—	18	1	—	1	8	—	1	10
2	—	16	—	—	18	8	—	1	4	—	1	8
3	—	16	6	—	19	3	—	1	2	—	1	6
4	—	17	—	—	19	10	—	1	2	8	1	4
5	—	17	6	—	1	5	—	1	3	4	1	2
6	—	18	—	—	1	1	—	1	4	—	1	10
7	—	18	6	—	1	7	—	1	4	8	1	10
8	—	19	—	—	1	2	—	1	5	4	1	8
9	—	19	6	—	1	2	9	—	1	6	1	6
40	1	—	—	—	1	3	4	—	1	6	1	4
1	1	—	6	—	1	3	11	—	1	7	1	2
2	1	1	—	—	1	4	6	—	1	8	1	—
3	1	1	6	—	1	5	1	—	1	8	1	10
4	1	2	—	—	1	5	8	—	1	9	1	8
5	1	2	6	—	1	6	3	—	1	10	1	6
6	1	3	—	—	1	6	10	—	1	10	1	4
7	1	3	6	—	1	7	5	—	1	11	1	2
8	1	4	—	—	1	8	—	—	1	12	2	—
9	1	4	6	—	1	8	7	—	1	12	2	10
50	1	5	—	—	1	9	2	—	1	13	2	8
1	1	5	6	—	1	9	9	—	1	14	2	6
2	1	6	—	—	1	10	4	—	1	14	2	4
3	1	6	6	—	1	10	11	—	1	15	2	2
4	1	7	—	—	1	11	6	—	1	16	2	—
5	1	7	6	—	1	12	1	—	1	16	2	10

TEN MONTHS.

441

L. at	3 per Cent.			3 ¹ / ₂ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	1	8	—	1	12	8	1	17	4	2	6	8
7	1	8	6	1	13	3	1	18	—	2	7	6
8	1	9	—	1	13	10	1	18	8	2	8	4
9	1	9	6	1	14	5	1	19	4	2	9	2
60	1	10	—	1	15	—	2	—	—	2	10	—
1	1	10	6	1	15	7	2	—	8	2	10	10
2	1	11	—	1	16	2	2	1	4	2	11	8
3	1	11	6	1	16	9	2	2	—	2	12	6
4	1	12	—	1	17	4	2	2	8	2	13	4
5	1	12	6	1	17	11	2	3	4	2	14	2
6	1	13	—	1	18	6	2	4	—	2	15	—
7	1	13	6	1	19	1	2	4	8	2	15	10
8	1	14	—	1	19	8	2	5	4	2	16	8
9	1	14	6	2	—	3	2	6	—	2	17	6
70	1	15	—	2	—	10	2	6	8	2	18	4
1	1	15	6	2	1	5	2	7	4	2	19	2
2	1	16	—	2	2	—	2	8	—	3	—	—
3	1	16	6	2	2	7	2	8	8	3	—	10
4	1	17	—	2	3	2	2	9	4	3	1	8
5	1	17	6	2	3	9	2	10	—	3	2	6
6	1	18	—	2	4	4	2	10	8	3	3	4
7	1	18	6	2	4	11	2	11	4	3	4	2
8	1	19	—	2	5	6	2	12	—	3	5	—
9	1	19	6	2	6	1	2	12	8	3	5	10
80	2	—	—	2	6	8	2	13	4	3	6	8
1	2	—	6	2	7	3	2	14	—	3	7	6
2	2	1	—	2	7	10	2	14	8	3	8	4
3	2	1	6	2	8	5	2	15	4	3	9	2
4	2	2	—	2	9	—	2	16	—	3	10	—
5	2	2	6	2	9	7	2	16	8	3	10	10
6	2	3	—	2	10	2	2	17	4	3	11	8
7	2	3	6	2	10	9	2	18	—	3	12	6
8	2	4	—	2	11	4	2	18	8	3	13	4
9	2	4	6	2	11	11	2	19	4	3	14	2
90	2	5	—	2	12	6	3	—	—	3	15	—
1	2	5	6	2	13	1	3	—	8	3	15	10
2	2	6	—	2	13	8	3	1	4	3	16	8
3	2	6	6	2	14	3	3	2	—	3	17	6
4	2	7	—	2	14	10	3	2	8	3	18	4
5	2	7	6	2	15	5	3	3	4	3	19	2
6	2	8	—	2	16	—	3	4	—	4	—	—
7	2	8	6	2	16	7	3	4	8	4	—	10
8	2	9	—	2	17	2	3	5	4	4	1	8
9	2	9	6	2	17	9	3	6	—	4	2	6
100	2	10	—	2	18	4	3	6	8	4	3	4
200	5	—	—	5	16	8	6	13	4	8	6	2
300	7	10	—	8	15	—	10	—	—	12	10	—
400	10	—	—	11	13	4	13	6	8	16	13	4
500	12	10	—	14	11	8	16	13	4	20	16	8
600	15	—	—	17	10	—	20	—	—	25	—	—
700	17	10	—	20	8	4	23	6	8	29	3	4
800	20	—	—	23	6	8	26	13	4	33	6	8
900	22	10	—	26	5	—	30	—	—	37	10	—
1000	25	—	—	29	3	4	33	6	8	41	13	4
2000	50	—	—	58	6	8	66	13	4	83	6	8

L. at	3 per Cent.				3½ p. Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
1	—	—	6	2	—	—	7	3	—	—	8	3	—	—	11	—
2	—	1	1	—	—	1	3	2	—	1	5	3	—	1	10	—
3	—	1	7	3	—	1	11	—	—	2	2	2	—	2	9	—
4	—	2	2	2	—	2	6	3	—	2	11	1	—	3	8	—
5	—	2	9	—	—	3	2	2	—	3	8	—	—	4	7	—
6	—	3	3	2	—	3	10	1	—	4	4	3	—	5	6	—
7	—	3	10	—	—	4	6	—	—	5	1	3	—	6	5	—
8	—	4	4	3	—	5	1	2	—	5	10	2	—	7	4	—
9	—	4	11	2	—	5	9	1	—	6	7	1	—	8	3	—
10	—	5	6	—	—	6	5	—	—	7	4	—	—	9	2	—
11	—	6	—	2	—	7	—	3	—	8	—	3	—	10	1	—
12	—	6	7	—	—	7	8	2	—	8	9	3	—	11	—	—
13	—	7	1	3	—	8	4	—	—	9	6	2	—	11	11	—
14	—	7	8	2	—	8	11	3	—	10	3	1	—	12	10	—
15	—	8	3	—	—	9	7	2	—	11	—	—	—	13	9	—
16	—	8	9	2	—	10	3	1	—	11	8	3	—	14	8	—
17	—	9	4	—	—	10	11	—	—	12	5	3	—	15	7	—
18	—	9	10	3	—	11	6	2	—	13	2	2	—	16	6	—
19	—	10	5	2	—	12	2	1	—	14	11	1	—	17	5	—
20	—	11	—	—	—	12	10	—	—	14	8	—	—	18	4	—
1	—	11	6	2	—	13	5	3	—	15	4	3	—	19	3	—
2	—	12	1	—	—	14	1	2	—	16	1	3	—	1	2	—
3	—	12	7	3	—	14	9	—	—	16	10	2	—	1	1	—
4	—	13	2	2	—	15	4	3	—	17	7	1	—	1	2	—
5	—	13	9	—	—	16	—	2	—	18	4	—	—	1	2	11
6	—	14	3	2	—	16	8	1	—	19	—	3	—	1	3	10
7	—	14	10	—	—	17	4	—	—	19	9	3	—	1	4	9
8	—	15	4	3	—	17	11	2	—	1	—	6	2	1	5	8
9	—	15	11	2	—	18	7	1	—	1	1	3	1	1	6	7
30	—	16	6	—	—	19	3	—	—	1	2	—	—	1	7	6
1	—	17	—	2	—	19	10	3	—	1	2	8	3	1	8	5
2	—	17	7	—	—	1	—	6	2	1	3	5	3	1	9	4
3	—	18	1	3	—	1	1	2	—	1	4	2	2	1	10	3
4	—	18	8	2	—	1	1	9	3	1	4	11	1	1	11	2
5	—	19	3	—	—	1	2	5	2	1	5	8	—	1	12	1
6	—	19	9	2	—	1	3	1	1	1	6	4	3	1	13	—
7	—	1	—	4	—	1	3	9	—	1	7	1	3	1	13	11
8	—	1	—	10	2	—	1	4	4	2	1	7	10	2	1	14
9	—	1	1	5	2	—	1	5	—	1	8	7	1	1	15	9
40	—	1	2	—	—	1	5	8	—	1	9	4	—	1	16	8
1	—	1	2	6	2	—	1	6	3	3	1	10	—	1	17	7
2	—	1	3	1	—	—	1	6	11	2	1	10	9	3	1	18
3	—	1	3	7	3	—	1	7	7	—	1	11	6	2	1	19
4	—	1	4	2	2	—	1	8	2	3	1	12	3	1	2	—
5	—	1	4	9	—	—	1	8	10	2	1	13	—	—	2	1
6	—	1	5	3	2	—	1	9	6	1	1	13	8	3	2	2
7	—	1	5	10	—	—	1	10	2	—	1	14	5	3	2	3
8	—	1	6	4	3	—	1	10	9	2	1	15	2	2	2	4
9	—	1	6	11	2	—	1	11	5	1	1	15	11	1	2	4
50	—	1	7	6	—	—	1	12	1	—	1	16	8	—	2	5
1	—	1	8	—	2	—	1	12	8	3	1	17	4	3	2	6
2	—	1	8	7	—	—	1	13	4	2	1	18	1	3	2	7
3	—	1	9	1	3	—	1	14	—	—	1	18	10	2	2	8
4	—	1	9	8	2	—	1	14	7	3	1	19	7	1	2	9
5	—	1	10	3	—	—	1	15	3	2	2	—	4	—	2	10

ELEVEN MONTHS.

443

L. at	3 per Cent.			3 $\frac{1}{2}$ p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	1	10	9 2	1	15	11 -	2	1	- 3	2	11	4 -
7	1	11	4 1	1	16	6 3	2	1	9 3	2	12	3 -
8	1	11	10 3	1	17	2 2	2	2	6 2	2	13	2 -
9	1	12	5 2	1	17	10 1	2	3	3 1	2	14	1 -
60	1	13	- -	1	18	6 -	2	4	- -	2	15	- -
1	1	13	6 2	1	19	1 2	2	4	8 3	2	15	11 -
2	1	14	1 1	1	19	9 1	2	5	5 3	2	16	10 -
3	1	14	7 3	2	-	5 -	2	6	2 2	2	17	9 -
4	1	15	2 2	2	1	- 3	2	6	11 1	2	18	8 -
5	1	15	9 -	2	1	8 2	2	7	8 -	2	19	7 -
6	1	16	3 2	2	2	4 -	2	8	4 3	3	-	6 -
7	1	16	10 1	2	2	11 3	2	9	1 3	3	1	5 -
8	1	17	4 3	2	3	7 2	2	9	10 2	3	2	4 -
9	1	17	11 2	2	4	3 1	2	10	7 1	3	3	3 -
70	1	18	6 -	2	4	11 -	2	11	4 -	3	4	2 -
1	1	19	- 2	2	5	6 2	2	12	- 3	3	5	1 -
2	1	19	7 1	2	6	2 1	2	12	9 3	3	6	- -
3	2	-	1 3	2	6	10 -	2	13	6 2	3	6	11 -
4	2	-	8 2	2	7	5 3	2	14	3 1	3	7	10 -
5	2	1	3 -	2	8	1 2	2	15	- -	3	8	9 -
6	2	1	9 2	2	8	9 -	2	15	8 3	3	9	8 -
7	2	2	14 1	2	9	4 3	2	16	5 3	3	10	7 -
8	2	2	10 3	2	10	- 2	2	17	2 2	3	11	6 -
9	2	3	5 2	2	10	8 1	2	17	11 1	3	12	5 -
80	2	4	- -	2	11	4 -	2	18	8 -	3	13	4 -
1	2	4	6 2	2	11	11 2	2	19	4 3	3	14	3 -
2	2	5	1 1	2	12	7 1	3	-	1 3	3	15	2 -
3	2	5	7 3	2	13	3 -	3	-	10 2	3	16	1 -
4	2	6	2 2	2	13	10 3	3	1	7 1	3	17	- -
5	2	6	9 -	2	14	6 2	3	2	4 -	3	17	11 -
6	2	7	3 2	2	15	2 -	3	3	- 3	3	18	10 -
7	2	7	10 1	2	15	9 3	3	3	9 3	3	19	9 -
8	2	8	4 3	2	16	5 2	3	4	6 2	4	-	8 -
9	2	8	11 2	2	17	1 1	3	5	3 1	4	1	7 -
90	2	9	6 -	2	17	9 -	3	6	- -	4	2	6 -
1	2	10	- 2	2	18	4 2	3	6	8 3	4	3	5 -
2	2	10	7 1	2	19	- 1	3	7	5 3	4	4	4 -
3	2	11	1 3	2	19	8 -	3	8	2 2	4	5	3 -
4	2	11	8 2	3	-	3 3	3	8	11 1	4	6	2 -
5	2	12	3 -	3	-	11 2	3	9	8 -	4	7	1 -
6	2	12	9 2	3	1	7 -	3	10	4 3	4	8	- -
7	2	13	4 1	3	2	2 3	3	11	1 3	4	8	11 -
8	2	13	10 3	3	2	10 2	3	11	10 2	4	9	10 -
9	2	14	5 2	3	3	6 1	3	12	7 1	4	10	9 -
100	2	15	- -	3	4	2 -	3	13	4 -	4	11	8 -
200	5	10	- -	6	8	4 -	7	6	8 -	9	3	4 -
300	8	5	- -	9	12	6 -	11	-	- -	13	15	- -
400	11	-	- -	12	16	8 -	14	13	4 -	18	6	8 -
500	13	15	- -	16	-	10 -	18	6	8 -	22	18	4 -
600	16	10	- -	19	5	- -	22	-	- -	27	10	- -
700	19	5	- -	22	9	2 -	25	13	4 -	32	1	8 -
800	22	-	- -	25	13	4 -	29	6	8 -	36	13	4 -
900	24	15	- -	28	17	6 -	33	-	- -	41	5	- -
1000	27	10	- -	32	1	8 -	36	13	4 -	45	16	8 -
2000	55	-	- -	64	3	4 -	73	6	8 -	91	13	4 -

444 TWELVE MONTHS, or ONE YEAR.

L. at	3 per Cent.				3 ½ p. Cent.				4 per Cent.				5 per Cent.			
	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.	l.	s.	d.	f.
1	—	—	7	1	—	—	8	2	—	—	9	3	—	1	—	—
2	—	1	2	2	—	1	5	—	—	1	7	1	—	2	—	—
3	—	1	9	3	—	2	1	1	—	2	5	—	—	3	—	—
4	—	2	5	—	—	2	9	3	—	3	2	2	—	4	—	—
5	—	3	—	—	—	3	6	—	—	4	—	—	—	5	—	—
6	—	3	7	1	—	4	2	2	—	4	9	3	—	6	—	—
7	—	4	2	2	—	4	11	—	—	5	7	1	—	7	—	—
8	—	4	9	3	—	5	7	1	—	6	5	—	—	8	—	—
9	—	5	5	—	—	6	3	3	—	7	2	2	—	9	—	—
10	—	6	—	—	—	7	—	—	—	8	—	—	—	10	—	—
11	—	6	7	1	—	7	8	2	—	8	9	3	—	11	—	—
12	—	7	2	2	—	8	5	—	—	9	7	1	—	12	—	—
13	—	7	9	3	—	9	1	1	—	10	5	—	—	13	—	—
14	—	8	5	—	—	9	9	3	—	11	2	2	—	14	—	—
15	—	9	—	—	—	10	6	—	—	12	—	—	—	15	—	—
16	—	9	7	1	—	11	2	2	—	12	9	3	—	16	—	—
17	—	10	2	2	—	11	11	—	—	13	7	1	—	17	—	—
18	—	10	9	3	—	12	7	1	—	14	5	—	—	18	—	—
19	—	11	5	—	—	13	3	3	—	15	2	2	—	19	—	—
20	—	12	—	—	—	14	—	—	—	16	—	—	—	20	—	—
1	—	12	7	1	—	14	8	2	—	16	9	3	—	1	—	—
2	—	13	2	2	—	15	5	—	—	17	7	1	—	1	—	—
3	—	13	9	3	—	16	1	1	—	18	5	—	—	1	—	—
4	—	14	5	—	—	16	9	3	—	19	2	2	—	1	—	—
5	—	15	—	—	—	17	6	—	—	—	—	—	—	1	—	—
6	—	15	7	1	—	18	2	2	—	1	—	9	3	1	—	—
7	—	16	2	2	—	18	11	—	—	1	1	7	1	1	—	—
8	—	16	9	3	—	19	7	1	—	1	2	5	—	1	—	—
9	—	17	5	—	—	1	—	3	3	1	3	2	2	1	—	—
30	—	18	—	—	—	1	1	—	—	1	4	—	—	1	—	—
1	—	18	7	1	—	1	1	8	2	1	4	9	3	1	—	—
2	—	19	2	2	—	1	2	5	—	1	5	7	1	1	—	—
3	—	19	9	3	—	1	3	1	1	1	6	5	—	1	—	—
4	—	1	—	5	—	1	3	9	3	1	7	2	2	1	—	—
5	—	1	1	—	—	1	4	6	—	1	8	—	—	1	—	—
6	—	1	1	7	1	1	5	2	2	1	8	9	3	1	—	—
7	—	1	2	2	2	1	5	11	—	1	9	7	1	1	—	—
8	—	1	2	9	3	1	6	7	1	1	10	5	—	1	—	—
9	—	1	3	5	—	1	7	3	3	1	11	2	2	1	—	—
40	—	1	4	—	—	1	8	—	—	1	12	—	—	2	—	—
1	—	1	4	7	1	1	8	8	2	1	12	9	3	2	—	—
2	—	1	5	2	2	1	9	5	—	1	13	7	1	2	—	—
3	—	1	5	9	3	1	10	1	1	1	14	5	—	2	—	—
4	—	1	6	5	—	1	10	9	3	1	15	2	2	2	—	—
5	—	1	7	—	—	1	11	6	—	1	16	—	—	2	—	—
6	—	1	7	7	1	1	12	2	2	1	16	9	3	2	—	—
7	—	1	8	2	2	1	12	11	—	1	17	7	1	2	—	—
8	—	1	8	9	3	1	13	7	1	1	18	5	—	2	—	—
9	—	1	9	5	—	1	14	3	3	1	19	2	2	2	—	—
50	—	1	10	—	—	1	15	—	—	2	—	—	—	2	—	—
1	—	1	10	7	1	1	15	8	2	2	—	9	3	2	—	—
2	—	1	11	2	2	1	16	5	—	2	1	7	1	2	—	—
3	—	1	11	9	3	1	17	1	1	2	2	5	—	2	—	—
4	—	1	12	5	—	1	17	9	3	2	3	2	2	2	—	—
5	—	1	13	—	—	1	18	6	—	2	4	—	—	2	—	—

TWELVE MONTHS, or ONE YEAR. 445

L. at	3 per Cent.			3 1/2 p. Cent.			4 per Cent.			5 per Cent.		
	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.	l.	s.	d. f.
56	1	13	7 1	1	19	2 2	2	4	9 3	2	16	—
7	1	14	2 2	1	19	11 —	2	5	7 1	2	17	—
8	1	14	9 3	2	—	7 1	2	6	5 —	2	18	—
9	1	15	5 —	2	1	3 3	2	7	2 2	2	19	—
60	1	16	— —	2	2	— —	2	8	— —	3	—	—
1	1	16	7 1	2	2	8 2	2	8	9 3	3	1	—
2	1	17	2 2	2	3	5 —	2	9	7 1	3	2	—
3	1	17	9 3	2	4	1 1	2	10	5 —	3	3	—
4	1	18	5 —	2	4	9 3	2	11	2 2	3	4	—
5	1	19	— —	2	5	6 —	2	12	— —	3	5	—
6	1	19	7 1	2	6	2 2	2	12	9 3	3	6	—
7	2	—	2 2	2	6	11 —	2	13	7 1	3	7	—
8	2	—	9 3	2	7	7 1	2	14	5 —	3	8	—
9	2	1	5 —	2	8	3 3	2	15	2 2	3	9	—
70	2	2	— —	2	9	— —	2	16	— —	3	10	—
1	2	2	7 1	2	9	8 2	2	16	9 3	3	11	—
2	2	3	2 2	2	10	5 —	2	17	7 1	3	12	—
3	2	3	9 3	2	11	1 1	2	18	5 —	3	13	—
4	2	4	5 —	2	11	9 3	2	19	2 2	3	14	—
5	2	5	— —	2	12	6 —	3	—	— —	3	15	—
6	2	5	7 1	2	13	2 2	3	—	9 3	3	16	—
7	2	6	2 2	2	13	11 —	3	1	7 1	3	17	—
8	2	6	9 3	2	14	7 1	3	2	5 —	3	18	—
9	2	7	5 —	2	15	3 3	3	3	2 2	3	19	—
80	2	8	— —	2	16	— —	3	4	— —	4	—	—
1	2	8	7 1	2	16	8 2	3	4	9 3	4	1	—
2	2	9	2 2	2	17	5 —	3	5	7 1	4	2	—
3	2	9	9 3	2	18	1 1	3	6	5 —	4	3	—
4	2	10	5 —	2	18	9 3	3	7	2 2	4	4	—
5	2	11	— —	2	19	6 —	3	8	— —	4	5	—
6	2	11	7 1	3	—	2 2	3	8	9 3	4	6	—
7	2	12	2 2	3	—	11 —	3	9	7 1	4	7	—
8	2	12	9 3	3	1	7 1	3	10	5 —	4	8	—
9	2	13	5 —	3	2	3 3	3	11	2 2	4	9	—
90	2	14	— —	3	3	— —	3	12	— —	4	10	—
1	2	14	7 1	3	3	8 2	3	12	9 3	4	11	—
2	2	15	2 2	3	4	5 —	3	13	7 1	4	12	—
3	2	15	9 3	3	5	1 1	3	14	5 —	4	13	—
4	2	16	5 —	3	5	9 3	3	15	2 2	4	14	—
5	2	17	— —	3	6	6 —	3	16	— —	4	15	—
6	2	17	7 1	3	7	2 2	3	16	9 3	4	16	—
7	2	18	2 2	3	7	11 —	3	17	7 1	4	17	—
8	2	18	9 3	3	8	7 1	3	18	5 —	4	18	—
9	2	19	5 —	3	9	3 3	3	19	2 2	4	19	—
100	3	—	— —	3	10	— —	4	—	— —	5	—	—
200	6	—	— —	7	—	— —	8	—	— —	10	—	—
300	9	—	— —	10	10	— —	12	—	— —	15	—	—
400	12	—	— —	14	—	— —	16	—	— —	20	—	—
500	15	—	— —	17	10	— —	20	—	— —	25	—	—
600	18	—	— —	21	—	— —	24	—	— —	30	—	—
700	21	—	— —	24	10	— —	28	—	— —	35	—	—
800	24	—	— —	28	—	— —	32	—	— —	40	—	—
900	27	—	— —	31	10	— —	36	—	— —	45	—	—
1000	30	—	— —	35	—	— —	40	—	— —	50	—	—



**BOOKS Printed for R. WARE, at the Bible and Sun
on Ludgate-Hill.**

A NEW GENERAL ENGLISH DICTIONARY; peculiarly calculated for the Use and Improvement of such as are unacquainted with the Learned Languages. Wherein the difficult Words, and Technical Terms made use of in

<i>Anatomy,</i>	<i>Grammar,</i>	<i>Mathematicks,</i>
<i>Architecture;</i>	<i>Hawking,</i>	<i>Mechanicks,</i>
<i>Arithmetic;</i>	<i>Heraldry,</i>	<i>Musick;</i>
<i>Algebra;</i>	<i>History,</i>	<i>Navigation,</i>
<i>Astronomy,</i>	<i>Horsemanſhip,</i>	<i>Painting,</i>
<i>Botany,</i>	<i>Hunting,</i>	<i>Poetry,</i>
<i>Chemistry,</i>	<i>Husbandry,</i>	<i>Rhetorick,</i>
<i>Divinity,</i>	<i>Law,</i>	<i>Sculpture,</i>
<i>Gardening,</i>	<i>Logick,</i>	<i>Surgery, &c.</i>

Are not only fully explained, but accented on their proper Syllables, to prevent a vicious Pronunciation; and mark'd with initial Letters, to denote the Part of Speech, to which each Word peculiarly belongs. To which is prefix'd, *A Compendious English Grammar*, with general Rules for the ready Formation of one Part of Speech from another; by the due Application whereof, such as understand *English* only, may be able to write as correctly and elegantly, as those who have been some Years conversant in the *Latin, Greek, &c.* Languages. Together with a *Supplement*, of the proper Names of the most noted Kingdoms, Provinces, Cities, Towns, Rivers, &c. throughout the known World. As also, of the most celebrated Emperors, Kings, Queens, Priests, Poets, Philosophers, Generals, &c. whether *Jewish, Pagan, Mahometan, or Christian*; but more especially such as are mentioned either in the *Old or New Testament*. The Whole alphabetically digested, and accented in the same Manner, and for the same Purpose, as the preceding Part; being collected for the Use of such, as have but an imperfect Idea of the *English Orthography*. Originally begun by the late Rev. Mr. *THOMAS DICHE*, School-Master at *Stratford-le-Bow*, Author of the *Guide to the English Tongue, the Spelling Dictionary, &c.* And now finish'd by *WILLIAM PARDON*, Gent. The 7th Edition, with the Addition of the several Market-Towns in *England and Wales*, giving a general Description of the Places, their Situations, Market-Days, Government, Manufactories, Number of Representatives sent to Parliament, Distances from *London*, both in computed and measured Miles, &c. Price 6 s.

2. The *Spelling Dictionary*; or, A Collection of all the common Words in the *English Tongue*. The 8th Edition, with the Addition of proper Names both of Persons and Places. Price 1 s. 6 d. or both bound together 2 s. 6 d.

3. The Fables of *Phædrus*, (who was made a Dorisen of *Rome* by *Augustus Cæsar*) under the following Heads, viz. *The weakest goes to the Wall*; *Choose the least Evil*; *Be content in your Station*; *All covet, all lose*; *Keep not too great Company*, &c. Rendered into familiar *English*. The 2d Edition, Price 1 s.

4. The Youth's Guide to the *Latin Tongue*; or, An Explication of *Propria quæ Maribus, Quæ Genus*, and *As in Prasænti*: wherein the Rules are made plain and easy to the Capacity of young Learners. The 3d Edition, Price 1 s.

5. *Vocabularium Latiale*; or, A *Latin Vocabulary*, in two Parts: The First, being a Collection of the most useful and easy *Latin Words*, whether Primitive or Derivative, with their Signification in *English*, after the Order of the Eight Parts of Speech, giving a Specimen of each, and naturally shewing the Gender, Increase, Declension, and

BOOKS printed, &c.

Tense, and Separe of Verbs, both Simple and Compound: The Second, shewing the Variation and Declining of all the declinable Parts, both Regular and Irregular. By *Thomas Dyke*. The 7th Edition.

6: **The Builder's Jewel;** or, the Youth's Instructor, and Workman's Remembrance. Explaining short and easy Rules made familiar to the meanest Capacity, for Drawing and Working, 1. The five Orders of Columns entire; of any Part of an Order, without Regard to the Module or Diameter. And to enrich them with their Rusticks, Flutings, Cappings, Dentules, Modillions, &c. Also to proportion their Doors, Windows, Intercolumnations, Porticos, and Arcades. Together with fourteen Varieties of Raking, Circular, Scroll'd, Compound, and Contracted Pediments; and the true Formation and Accadering of their Raking and returned Cornices; and Mouldings for capping their Dentules and Modillions. 2. Block and Cantaliver Cornices, Rustick Quoins, Cornices proportioned to Rooms, Angle Brackets, Mouldings for Tabernacle Frames, Pannelling, and centering for Groins, Traus'd Partitions, Girders, Roofs, and Domes. With a Section of the Dome of St. Paul's, London. The whole illustrated with upwards of two hundred Examples, engraved on an hundred Copper-Plates. By *B. and T. Langley*. Price 4s. 6d.

BOOKS printed for W. JOHNSTON, at the Golden Ball in St. Paul's Church Yard.

A NEW GEOGRAPHICAL and HISTORICAL GRAMMAR: wherein the Geographical Part is truly Modern; and the present State of the several Kingdoms of the World is so interspersed, as to render the Study of Geography both Entertaining and Instructive. Containing, I. A Description of the Figure and Motion of the Earth. II. Geographical Definitions and Problems, being a necessary Introduction to this Study. III. A general Division of the Globe into Land and Water. IV. The Situation and Extent of the several Countries contained in each Quarter of the World; their Cities, Chief Towns, History, Present State, respective Forms of Government, Forces, Revenues, Taxes, Revolutions, and memorable Events. Together with an Account of the Air, Soil, Produce, Traffic, Curiosities, Arms, Religion, Language, Universities, Bishopricks, Manners, Customs, Habits, and Coins, in Use in the several Kingdoms and States described. By *Mr. Salmon*. Illustrated with a Set of Twenty three new Maps of the several Countries; drawn, by the Direction of *Mr. Salmon*, and engraved by *Mr. Jefferys*, Geographer to his Royal Highness the Prince of Wales. The 3d Edition, with very great Additions and Improvements. Price 6s.

2. **The Compleat Family Piece:** And Country Gentleman and Farmer's Best Guide. In three Parts. Part I. Containing, A very choise and valuable Collection of above One Thousand well-experienced practical Family Receipts in Physick and Surgery; Cookery, Pastry and Confectionary, with a complete Bill of Fare for every Month in the Year, and Instructions for placing the Dishes on a Table; for Pickling and Preserving all Sorts of Fruits, Tongues, Hams, &c. for Distilling and Fermenting of all Compound, Simple Waters and Spirits, for Making Mum, Cyder and Perry, Mead and Metheglin; and for Making and Preserving all Sorts of excellent *English* Wines; with good and useful Instructions for Brewing fine, strong, good, wholesome and palatable Drinks, as Beers, Ales, &c. in small Quantities, and at easy Rates, for the Use of all private Families; with divers other useful and valuable Receipts interspersed through the Whole, particularly Dr.



BOOKS printed, &c.

the Stone and Gravel : Many of which were never before printed, and the others experimentally taken from the latest and very best Authorities ; and being all regularly digested under their proper Heads, are divided into six different Chapters. Part II. Containing, 1. Full Instructions to be observed in Hunting, Courſing, Setting and Shooting, with an Account of the ſeveral Kinds of Dogs neceſſary for thoſe Diversions, and Receipts for the Cure of all common Diſtempers to which they are liable ; as alſo Receipts for the Cleaning and Preſerving of Boots, Fire-Arms, &c. 2. Cautions, Rules and Directions to be taken and obſerved in Fiſhing ; with the Manner of Making and Preſerving of Rods, Lines, Floats, artificial Flies, &c. and for Chuſing and Preſerving ſeveral Sorts of curious Baits. 3. A full and complete Kalendar of all Work neceſſary to be done in the Fruit, Flower and Kitchen Gardens, Green-Houſe, &c. with the Produce of each, in every Month throughout the whole Year. Part III. Containing, Practical Rules and Methods for the Improving of Land; and Managing a Farm in all its Branches ; with ſeveral curious Receipts for Brining, Liming and Preparing Wheat, Barley, Oats, &c. for Sowing ; excellent Receipts for Deſtroying of Moles, Rats and Mice ; a great Number of choice Receipts for the Cure of all common Diſtempers incident to all Sorts of Cattle ; Directions for Painting ; Inſtructions for Keeping Bees, Tame Rabbits and Pigeons ; and a complete Kalendar of all Buſineſs neceſſary to be done in the Field, Yard, &c. by the Farmer, in every Month throughout the Year. With a complete Alphabetical Index to each Part. The 3d Edition improved, Price bound 3 s. 6 d.

3. **Panarithmologia :** or, The Trader's Sure Guide. Containing, exact and uſeful Tables ready caſt up, adapted to the Uſe of Merchants, Mercers, Bankers, Drapers, Goldſmiths, Grocers, Brewers, Weavers, and Haberdashers, and all that deal by Wholeſale or Retail ; alſo, for Carpenters, Bricklayers, Joiners, Glaziers, Plaiſterers, Plummers, and Painters ; and all other Mechanicks. As alſo for all Purchaſers of Houſes or Lands : Shewing the Intereſt of Money, and Diſcount on prompt Payment. The 10th Edition corrected. By *W. Leybourn*.

BOOKS printed for M. and T. LONGMAN in Pater-Nöſter-Row.

Parmacopœia Officialis & Extemporanea : Or, A compeat *Engliſh* Diſpenſatory ; in two Parts, Theoretick and Practical. Part I. In two Books. Book I. Of the Definition, Subject, general Intentions, Media, Inſtruments, and Operations of Pharmacy. Book II. Of the Distribution into proper Claſſes, General Nature, and Medicinal Virtues, &c. of Simples. Part II. In five Books. Book I. Of the Preparation of Simples. Book II. Of Saline Preparations. Book III. Of Metalline Preparations. Book IV. Of Official Compoſitions ; containing all the Preſcriptions of the *London and Edinburgh* Pharmacopœias, according to the laſt Alterations thereof, together with thoſe of other Authors, and the preſent Practice, which claim any Notice. Book V. Of Extemporaneous Preſcriptions ; which are therein diſpoſed into proper Claſſes according to their ſeveral Curative Intentions. By *John Quincy*, M. D. The 12th Edition, much enlarged and corrected.

2. **Lexicon Phyſico-medicum :** Or, A new Medicinal Dictionary, explaining the different Terms uſed in the ſeveral Branches of the Profeſſion, and in ſuch Parts of natural Philoſophy as are introductory thereunto ; with an Account of the Things ſignified by ſuch Terms. Collected from the moſt eminent Authors ; and particularly thoſe who have writ on mechanical Principles. By the ſame Author. The 4th Edition : with new Improvements from the late

Upper Cornish